

A MANUAL OF THE PUDUKKÓTTAI STATE

Volume I

(Second and Revised Edition)

EDITED BY

K.R. VENKATARAMA AYYAR

PUBLISHED BY

DIRECTOR OF MUSEUMS

GOVERNMENT OF TAMILNADU

2004



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OF
THE PUDUKKÓTTAI STATE

Volume I
(Second and Revised Edition)

Published under the authority of the Pudukkottai Darbar

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K.R. VENKATARAMA AYYAR

PUDUKKOTTAI
PRINTED AT THE SRI BRIHADAMBA STATE PRESS
1938



FOREWORD

The Pudukkottai Princely State was keen in preserving the history and heritage of the State. A museum and the department of Archaeology were established in 1910 and books were also published on the history of the State. The first edition of the Manual of Pudukkottai State, Volume I was brought out in 1920 and a revised edition in 1938. Volume II of the Manual was published in 1944. These books are important for the study of the south Indian History. They are the mine of information for the history of Pudukkottai region. These books are interesting and informative and even enlighten Engineering students like me.

These volumes were out of print for a long time and not available for consultation to the student and scholars. The department of Museums, Tamilnadu took-up this cause, reprinted and published Volume II of the Pudukkottai Manual and Inscriptions of Pudukkottai State, in 2002. When Dr. J. Raja Mohamad, Assistant Director of Museum (formerly Curator, Pudukkottai Museum) brought to my notice that Volume I of the Manual is due for reprinting, I was happy to release funds for reprinting this book as a publication of the department of Museums. This was possible because of the liberal grants from the Government of Tamilnadu for reprinting such rare books. Our thanks to M/s. Seawaves Printers, Chennai for executing the reprinting work of this book.

M.A. SIDDIQUE

PREFACE.

IN June 1934, the Darbar decided that since the first edition of the State Manual issued in 1920 was out of date and also susceptible of considerable improvement, a new and up-to-date edition should be prepared. Owing to various circumstances no progress could be made with the work till it was entrusted to Mr. K. R. Venkatarama Aiyar, B. A., L. T., M. R. A. S., Head-Master, High School Section, His Highness the Raja's College, Pudukkottai, in December 1935. The manuscript draft of the first volume was ready by September 1936, but owing to the time and labour involved in putting it into its final form, and to congestion of work in the State Press, it could not be published till 1938.

The Darbar have exercised close personal supervision over the work throughout. Most of the chapters were originally drafted by the Manual Officer himself, but Chapter II 'Flora and Fauna' was drafted by Mr. K. R. Srinivasa Aiyar, and Chapter IV 'Agriculture' by Mr. T. S. Sundaram Aiyar who was supplied with necessary information by the Officers of the Agricultural Department.

This volume is to a considerable extent based on the corresponding chapters of the first edition, though the phraseology has undergone considerable modifications. Chapters I and II however have been rewritten and amplified. The section of Chapter III relating to 'Cultural Anthropology' has been recast and includes Chapter XVIII of the old edition. Chapter VII on 'Trade and Occupation' contains much entirely new matter. Chapter XII on 'Local Self-Government' contains two new sections, 'Unions and Village Panchayats' and 'Rural Development Activities.' Chapters XI (Co-operative Movement), XIX (Devastanam and Charities), XXI (Finance) and XXII (Museum and Archæology) are altogether new.

The Chapter on General History and the Gazetteer section have had to be considerably amplified and will form the second volume of this work.

Much care has been bestowed on the selection of illustrations to ensure that they should be reproduced in a manner worthy of the work. The photographs from which they have been reproduced were supplied by Messrs. K. Venkatarengam Raju, Museum Curator, and L. Ganesa Sarma of the Bharat Studio, Pudukkottai, and the blocks have been prepared by the Calcutta Chromo-type Ltd. Dr. Stella Kramrisch of the Universities of London and Calcutta has placed the Darbar under a debt of gratitude for advice and help in regard to them.

It is impossible to mention all those to whom the Darbar's thanks are due for their assistance, but special recognition is due to Mr. K. Venkatarengam Raju, Curator of the State Museum, Mr. N. P. Swaminatha Aiyar, State Archæologist, Mr K. R. Srinivasa Aiyar and Mr. T. S. Sundaram Aiyar, while the Superintendent of the State Press and his staff deserve to be congratulated on their work.

Every effort has been made to make this work accurate and complete. The Darbar will be grateful to any one who brings any errors or omissions to their notice.

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48	26	Many of fishes	Many of the fishes
68	5	culture	cultural
72	2	sown	sewn
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A MANUAL

OF

THE PUDUKKÓTTAI STATE

CHAPTER I.

I. PHYSICAL FEATURES.

Position and boundaries.—The State of Pudukkóṭṭai lies between the parallels of 10°7′ and 11°4′ North Latitude and between the meridians of 78°25′ and 79°12′ East Longitude. The area of the State is 1,178 square miles. Its greatest length from East to West is 52 miles, and its greatest breadth from North to South is 41 miles. It is bounded on the North by the Trichinopoly and Tanjore Districts, on the West by the Trichinopoly District, on the South by the Ramnad District and on the East by the Tanjore District.

The surface of the country is characterised by flat plains in the East, and is intersected by streams and low hills in the West and the South. Piránmalai and the Sevalur Hills may be mentioned as natural boundaries though they run but for a short distance. The boundaries of the State changed with its gradual expansion as the result of conquests; and this fact accounts for the existence of several enclaves of Pudukkóṭṭai territory in the adjoining British territory. The State has no sea-board; the Bay of Bengal is about 12 miles from the easternmost point.

The State is the third in importance of the five Madras States included in the charge of the Agent to the Governor-General at Trivandrum, and is divided into three Taluks, Álangudi, Kolattúr and Tirumayam.

Rivers.—Most of the so-called rivers of the State are only jungle streams that remain dry for most of the year.

The Vellár is the longest stream in the State. It rises in the Véla Malai (வேழமலை) in the Marungápuri Zamíndári of the Kulitalai Taluk of Trichinopoly District and falls into the Bay of Bengal near Manamélkudi in the Tanjore District, after a course of about 85 miles. The river separates Tirumayam Taluk on the South from the Kolattúr and Álangudi Taluks on the North. It is torrential in character, suddenly rising in high freshes of short duration. In the Tirupperundurai Puránam this river is said to have been sent down to the earth by Śiva in answer to the prayer of king Śvétakétu for a river that would confer salvation on people bathing in it. The Sanskrit name of the river is Śvétanadi (white river). A few places on the banks of the river are considered particularly sacred; such are Péraiyúr, Pushyatturai near the town, Kadayakkudi, and Tiruvidayápatti.

The Kundáru takes its rise from the Kavinád tank, and after a course of about five miles joins the Vellár near Kadayakkudi.

The Pámbáru (called in Sanskrit Sarpanadi) is the surplus of the Perundurai tank near Mélúr in the Tirumayam Taluk. It empties itself into the Támaraikanmói tank near Tirumayam, and issuing from it flows in a south-easterly direction till it joins the Vellár near Arantángi. It takes off once again as a separate stream, and dividing into five branches falls into the Bay of Bengal.

The Agñánavimóchani or *Agniár* is the surplus of the Kolattúr tank. After passing through Perungalúr, Malaiyúr and Karambakkudi, it falls into the Bay of Bengal, south-west

of Adrámpatṇam, in the Tanjore District after a course of only about fifty miles.

The Mahárájasamudram river is a narrow torrential stream taking its rise from the highlands of Vallam in the Tanjore District. After flowing through Kilánkáḍu and Sengalméḍu in the Álanguḍi Taluk, it falls into the Agñánavimóchani to the south of Sándákóttai in the Tanjore District. According to Pharoah's Gazetteer of Southern India (1855), this stream was originally a branch of the Uyyakkondán channel in the Trichinopoly District but "it has been for ages long past in a total state of decay west of Vellum."

The Ambuliyàru has its source in Mánjanviḍuthi tank in the forest to the east of Tiruvaranguḷam, and after passing through Álanguḍi, Vadakáḍu and other villages falls into the Bay to the north of Sulóchana Bái Chattram in the Tanjore District.

The Kóraiyáru is the surplus of a tank in the Virálimalai firka. It passes to the west of Rájagiri, and to the east of Kaṭṭalúr in the Koḷattúr Taluk, and falls into the Uyyakkondán, three miles to the south of Trichinopoly.

The Súraiyáru is another stream in the Koḷattúr Taluk which falls into the Samudramkuḷam of the Trichinopoly District.

The Manimuktá river, or Tiruppattúr river, gathers the drainage of the eastern end of the Śirumalai and of the hills lying north of Nattam, both in the Madura District. The river carries the surplus water of a tank in Váráppúr Zamíndári, passes through Várput and Tirukkaḷambúr under the name of *Yenádiáru* and falls into the Neikkuppaikkanmói in the Tiruppattúr Taluk of the Sivaganga Zamíndári.

Hills.—The State contains a few hills and high rocks of which the most important are the following:—

1. *Piránmalai*, the highest hill in the State, on the south-west border and reaching a height of 2,119 feet above sea-level;

2. *Nárttámalai*, lying west of the road from Trichinopoly to Pudukkóṭṭai;
3. *Áluruttimalai* close to Nárttámalai;
4. The *Sevalúr* hills in Tirumayam Taluk, which are low craggy ridges covered with jungle, of which the Kánjáttimalai is an off-shoot;
5. The *Śittannavásal* hill near Annavásal;
6. The *Puram* hills, in the Arimalam vattam of the Tirumayam Taluk—a low ridge;
7. *Kunnattúrmalai*, a flat topped rock in the vattam of the same name in the Koḷattúr Taluk;

and 8. The *Sampatti* hills, in the north-west of the State, in Kiḻaiyúr vattam in the Koḷattúr Taluk.

On the tops or slopes of the rocks at Virálimalai, Neḍunguḍi, Kuḍumiámalai, Tirugókarṇam, Vaiyápuri, Ténimalai, Kumaramalai, Kunnánḍárkóil, Malayakóil and Malayaḍippaṭṭi are well-known temples.

II. GEOLOGY.

Perhaps the most valuable of the published reports that deal with the Geology of the State is Mr. Bruce Foote's *Records of the Geological Survey of the Pudukkóttai State, the northern part of the Madura District and the southern parts of the Tanjore and the Trichinopoly Districts (Records of the Geological Survey of India*, Vol. XII, part 3). In compiling the present account most of the information has been derived, and much repeated verbatim, from it.

Stratigraphy.—The rocks found in the Pudukkóṭṭai State may be divided as follows:—

1. Soils and subærial formations.
2. Alluvial formations, marine and fluviatile.
3. Laterite conglomerates, gravels and sands.
4. Cuddalore Sandstones, grits and conglomerates.
5. Upper Gondwana beds. Hard mottled shales.
6. Gneissic or metamorphic rocks.

Topography.—The gneissic rocks occupy the western part of the area and form the highest prominences in it. The line of hills stretching from south of Koḷattúr to Annavásal, and the granite gneiss hills to the south of the Veḷḷár at and near Tirumayam belong to this classification. A considerable part of the surface of the gneissic rocks is occupied by debris of the younger overlying rocks, which have been in great part destroyed by the denuding agency of atmospheric forces.

The rocks assigned to the Rájmahál section of the Upper Gondwana system are very slightly exposed, and though their contact with the gneiss is not visible, there is no reason to imagine that their base rests on anything else than the gneiss.

The Cuddalore Sandstones and grits rest, wherever their base is exposed, on the irregular surface of the gnessic rocks, and are themselves overlaid by laterite conglomerates, gravels and sands.

The conglomeratic beds of both groups occur in the western parts of the State. The gravelly and sandy members of the laterite group occupy the eastern part.

The laterite area is divided by the alluvial valleys of the several rivers (the Agñánavimóchaniár, the Veḷḷár, the Pámbár and the Maṇimuktánadi) into various patches.

The river alluvia are of no great extent or importance. Owing to the great extent of wet cultivation carried on along the various rivers and under tanks, the apparent area of the alluvium has, in the course of many centuries, been largely increased by the formation of artificial alluvial spreads, the boundaries between which and the true alluvia it is in very many, if not in most, cases impossible to determine with any accuracy.

The Gneissic or Metamorphic rocks.—The prevalent form in this region is quartzo-felspathic micaceous granitoid gneiss or semi-granitoid gneiss, of pinkish or greyish-pink colour. In texture it varies from a massive, coarse, highly granitoid rock to

a schistose gneiss nearly akin to mica schist. A very marked variety is a coarse granular quartz rock, very rudely bedded and showing numerous small indistinct cavities, from which some mineral has been weathered out. Finely banded granite gneiss of dense grain occurs here and there, for example at Tirugókarṇam and at Ammáchatram.

The Áḷuruṭṭimalai and Nárttámalai hills consist of banded slightly hornblendic granite gneiss of a pale grey colour, weathering to a pale dirty flesh colour, and showing characteristic bare rocky masses. The Annavàsal hills are of very similar petrological character, and so also is Kuḍumiámalai. These hills are almost bare of vegetation owing to their very rocky character, but to the east of Nárttámalai is a ridge of highly crystalline quartoze rock, which crumbles by weathering into a coarse grit, thickly covered by heavy thorny scrub. This band of granular quartoze gneiss is connected with a more southerly outcrop of similar rock on the south bank of the Veḷḷár.

Unconnected with any of the above beds is a band of the granular rock at Mallampaṭṭi, where the only occurrence of magnetic iron in the gneiss is met with. Little of the outcrop is seen, but a good deal of debris of a rich magnetite bed is found scattered about the fields.

Beautifully banded micaceous granite gneiss is to be seen at Virálimalai.

Among the more noteworthy outcrops of granite gneiss in the northern part of the State is a band of grey micaceous variety which forms large tors and bosses at Kiḷḷumalai. Round about Koḷattúr is micaceous granite gneiss distinctly bedded.

Near Koḷattúr on the boundary of the laterite are other fine outcrops of granite gneiss, as for instance near Nángupaṭṭi; such outcrops also occur at Perumánáḍu and Chittúr near the Veḷḷár.

The general strike of the bedding of the gneissic rocks trends to north and south, or north-by-west and south-by-east. But over

the southern part of the area, comprising the valley of the Maṇimuktár, northward to within a couple of miles of the Pambár valley at Tirumayam, the strike varies from east-by-south and west-by-north to north-west-by-west and south-east-by-east; in the central part no well-bedded rocks have been mapped, while in the northern part the strike changes from east-west to east-by-north and west-by-south.

The Cuddalore series.—The representatives of the Cuddalore series (established by Mr. H. F. Blanford for certain rocks in South Arcot and Trichinopoly Districts) which occur in our limits consist of coarse conglomerates, sandstones and grits, the latter passing locally into a rock perfectly undistinguishable from the common laterite which so largely covers the surface in this region. Here, as in so many other parts of the Coromandel coast, the slight slope of the country and the very low dip of the rocks have prevented the formation of really valuable natural sections. The extension of wet cultivation greatly militates against the formation of deep channels by the different streams, which give rise to the formation of local alluvial flats, which only add to the obscuration of the younger rocks, whose relations are generally very unsatisfactorily and imperfectly displayed, so that definite information regarding many interesting stratigraphical points is at present not procurable. The total absence, so far, of organic remains renders the correlation of detached exposures of even similar rocks of great and inevitable uncertainty.

Ill-compacted gritty shingle conglomerate occurs resting on the gneiss on the high grounds north-east of Pudukkóṭṭai near Muḷḷúr. Among the more southerly conglomerate beds are those met with in the Śengírai ridge, displayed by an extensive series of rain gullies which expose a considerable surface of the gritty conglomerate, but unfortunately do not cut deeply into it. The bedding is seen to dip east-north-east or east-by-north at angles of from 12° to 15°. The conglomerate varies from mottled brown to a pinkish and whitish, less frequently reddish, colour,

and is tolerably compact with a gritty matrix, including quartz and gneiss shingle from the size of a cocoanut downward, in moderate quàntity. The eastern slope of the ridge is overlaid by the massive and continuous bed of laterite conglomerate met with on the Coromandel coast; it covers a considerable space between Arimaḷam and Neḍunguḍi, and is itself lost sight of to the east under lateritic sands and the alluvium of the Veḷḷàr.

A second section of the Cuddalore beds forming the Śengírai ridge, situated near Áyanguḍi, has beds unlike the Śengírai ones; they are conglomerates of very coarse texture and ràther friable; the matrix, which varies from light-red to brown-red in colour, is semi-lateritic and vermicularly cellular to some extent. The enclosed shingle is mostly large and rounded; it is chiefly quartzose and all apparently of gneissic origin. The lowest bed seen is mottled and more gritty in texture, with fewer enclosed pebbles. The dip is southerly at low angles.

The best section of Cuddalore grits of the softer variety occurs near Perungaḷúr. Here the small stream, which feeds the tank, in descending from the high ground to the north cuts through the upper laterite beds, and exposes beds of typical grits in many gullies, forming miniature cañons of very perfect shape, with nearly vertical sides from 12 to 18 feet deep, and only 2 or 3 feet apart at the bottom. The section here displayed shows the following sequence of beds in descending order—

1. Black laterite conglomerate, on gravel;
2. Red-brown vermicularly porous conglomerate, passing down into;
3. Brown conglomerate with many pebbles of quartz-grit and older laterite; and
4. Grits, pale-mottled, generally showing columnar jointing, with vermicular tubes and scattered galls of fine clay.

The lateritic group.—The Cuddalore series is overlaid by the several members of the lateritic series, which vary from hard typical conglomerates through gritty beds to gravels, and finally to reddish sands, with variable quantities of gravelly pisolitic hæmatite concretions. The sandy beds occupy the lower slopes, while the conglomeratic beds occupy the higher grounds to the west, and often overlap widely on to the gneiss.

The various rivers which convey the drainage of the country to the sea divide the lateritic region into a number of minor areas or patches amounting in all to nine, of which the following are the more prominent.

1. *The southward continuation of the Tanjore patch.* Where the conglomerate is covered with soil, the latter is generally a very hard compact sandy clay of a red or yellow (bath-brick) colour, much marked by sun-cracks, which run in very regular systems and give the soil a tesselated appearance on a large scale. In the presence of water these laterite soils are fertile, but in the high dry downs, upon which they are oftenest seen, they bear little but a very low scrub.

2. *The Pudukkòttai patch.*—Striking spreads of hard typical conglomerate are to be seen in many places near the western boundary, and even at some miles distance from it, for example at Urriúr (near Perungaḷúr) in the extreme north-west corner of the patch, also nearly all along the left side of the Veḷḷár alluvium down to Arantángi, and to the north and north-west of Álanguḍi.

3. *The Śengirai patch.*—This contains an extensive and massive development of conglomerate on the eastern slope of the Śengirai ridge and the plain east of it. This great development of conglomerate is continued under the alluvium of the Pámbár and reappears in the Shahkótai patch, and is especially well seen at Kílánilaikóttai, where the walls of the

extensive old poligar fort are built of massive blocks of laterite quarried close by. The conglomerate is also admirably seen on the bluff east of Neḍunguḍi which may be regarded as the continuation of the Śengírai ridge south-westward.

4. *The Nallúr patch.*—Like the western part of the Tanjore patch this consists of a more gritty and rather less compact form than prevails over the spreads enumerated.

Alluvium.—The alluvia of the various small streams traversing our area are very limited, and are generally a whitish mixture of sandy clay, with laterite pellets and small debris of quartz and gneiss.

Soils.—The soils depend almost everywhere on the underlying rocks for their character. Red and reddish sandy soils abound everywhere. Black soil is not at all common, and occurs only under a few important irrigation tanks, where it must be regarded as of artificial origin. Where the conglomeratic laterite occurs, two forms of soil prevail, both of them hard clayey sands, the one of a bright red, the other of a pale yellow colour—often approaching in texture to true sandstone. Over the laterite bands, the soil is generally a nearly pure, less frequently somewhat clayey, sand.

Almost all the dry lands in the State are of red ferruginous soil; regar is found in the wet fields of the Tirumayam and Kolattúr Taluks and at scattered places in the Álangudi Taluk. The popular classification is as follows—

1. *Padugai.*—(alluvial soil). Alluvial soil of the kind prevalent in the Cauveri delta is rarely found in the State. The State paḍugai lands contain somewhat rich loamy soil, and as a result of constant manuring with green leaves, etc., have acquired a slightly chocolate colour. Such soil is found in villages situated close to forests, the green leaves from which are often used to manure the wet fields in the adjoining villages.

Amongst the villages in which this soil is found are Kavináḍ, and Vallanáḍ, in Álanguḍi Taluk, and Pudunilaivayal, Mélanilaivayal, Nedungudi, Ráyavaram, and Arimaḷam, in Tirumayam Taluk.

2. *Karisal.*—or black loamy soil found in the wet lands of the Tirumayam Taluk. In villages where, in the mixture of clay and sand, clay preponderates, the field yields a poor crop.

3. *Śevval.*—(red ferruginous) found almost throughout the State. This is the loamy soil as distinguished from

4. *Manal.*—(ferruginous sandy soil)

and 5. *Śaralai.*—(ferruginous gravelly soil)

6. *Kalar.*—(black clayey soil of a saline character) found in several villages in Tirumayam Taluk, from which salt was actually manufactured before its manufacture in the State was prohibited.

This classification is by no means a scientific one.

Economic Geology and Mineralogy.—Though poor in precious metals, the State produces a few useful minerals.

Granite and laterite are used for *building purposes,* in the construction of sluices, kalingulas or surplus weirs, revetments of tank bunds, etc. Granite of so fine a quality as to be suitable for delicate carving is quarried in the State. The laterite quarries yield stones of a very large size. Granite is now quarried under Government licenses at the following places—Tirugókarṇam, Puttámbúr, Tirumayam, Lambalakkuḍi, Konápet, Malayakóil, Péraiyúr, Usilamalaippárai, Virálimalai, Vittampaṭṭi, Kuḍumiá-malai, Pananguḍimalai, Ammáchatram, Vírappaṭṭi, Chittámbúr, and Kíranúr. Laterite quarries are to be found near Arimaḷam. The stones quarried in the State are much in demand in surrounding districts on account of their quality and excellence. The rocks in the State yield stone for *road metal.*

Specimens of *red jasper*, and pieces of *rock crystal* both white and violet in colour, have been picked up near the Śittannavásal rock and on a waste piece of land known as *pacchaippottal* in the Kolattúr Taluk. The violet-coloured crystals, which are considered to be *amethysts*, are not large; but the white ones are fairly big.

Lime of superior quality is prepared from *Kankar* found at Várappúr and Karuppudaiyánpatti. A rather inferior kind of Kankar is obtainable at Káraiyúr, Perumánadu, Ammáchatram and other places.

Brick clay is obtainable from superficial alluvial deposits. Bricks are manufactured in the Government factory from clay obtained from Pattáttikulam, north of Tirugókarnam.

Potter's clay is a fine variety collected from the beds covered by the fluviatile alluvial deposits of the irrigation tanks. Since the suppression of earth-salt manufacture in 1888, the silt is said to have become rather saline and not so good. Pots made at Malaiyúr and a few other places where the soil is not so saline, are strong and are in great demand.

Bangle-earth is of the alkaline variety and is found mostly in the Kolattúr Taluk. Bangle-makers in Trichinopoly purchase large quantities of this earth. Fairly good bangle-earth is also found in the beds of Nírpalani, Pérámbúr and Támaraikanmói tanks, at Kurambavayal near Karambakkudi, and in the waste lands of Rásipuram and Pákkudi.

Dhobie's earth is a whitish soil used for bleaching. It is found on the banks of the Vellár and the Nerinjikkudi stream.

Earth-salt was manufactured in 175 villages up to 1888 when the manufacture was suppressed in the State.

Saltpetre was once collected in and near the capital town,

Ochre of different colours is found in and near the Śengírai Forest and near Tiruvarangulam. It is used in making pigments, and crayons, and for water and oil colours, and is largely exported out of the State.

Iron.—It has already been mentioned that magnetic iron occurs at Malampatti. As Mr. Bruce Foote remarks, the metallic minerals in the State are represented by iron-ores only and those not of the highest quality. The conglomerate about Śengírai is thick and massive over an area of several square miles, and is remarkably rich in iron. There are traces of a considerable smelting industry having been carried on at no remote period at Áyangudi in the southern part of the State. An inscription dated the 4th year of Víra Páṇḍya (13th century) speaks of a smelting industry at Tiruvarangulam. The statistical account of the State for 1813 mentions several tracts where iron was found; among them are places near Andakkulam, Perungalúr, Thékkádu, Tiruvarangulam, Kilánilai, and Śengírai. From Mr. Baillie's report (1841) which states that "the monopoly of digging and smelting iron ore was farmed out for Rs. 1,300 a year," it is clear that iron was smelted in these places up to the middle of the last century.

Mica has been collected at Annavásal and Káraiyúr.

III. METEOROLOGY.

The climate of the State naturally resembles closely that of the surrounding districts of the Presidency. It is one of the drier areas in Southern India.

The earliest recorded meteorological observation (of rainfall only) is that for November, 1880. In about 1890 twelve rain-gauge stations were opened. All, except that at Tiruvarangulam, are still working. In September, 1905 an Observatory was opened at the capital.

Statistics of the average rainfall at the various recording stations in the State, and for the State as a whole, are given below—

Station.	Years recorded.	January to March.	April to May.	June to September.	October to December.	Total.
Pudukkóṭṭai ...	1906–17	1·34	3·99	15·44	14·56	35·33
	*1925–35	**2·91**	**5·10**	**12·46**	**18·05**	**38·52**
Álaṅguḍi ...	1906–17	1·83	3·29	16·72	14·36	36·20
	1925–35	**3·76**	**4·98**	**8·32**	**16·85**	**33·90**
Karambakkuḍi .	1906–17	1·77	2·70	9·67	11·57	25·71
	1925–35	**3·93**	**3·72**	**9·80**	**20·43**	**37·88**
Tirumayam ...	1906–17	1·94	4·53	19·38	12·89	38·74
	1925–35	**2·42**	**5·78**	**10·40**	**15·01**	**33·61**
Kiḷánilai ...	1906–17	1·30	2·76	13·92	13·21	31·19
	1925–35	**2·93**	**4·60**	**11·55**	**16·76**	**35·84**
Koḷattúr ...	1906–17	1·44	3·40	13·55	14·12	32·51
	1925–35	**2·48**	**3·98**	**8·65**	**15·85**	**30·96**
Virálimalai ...	1906–17	2·00	4·75	11·26	14·44	32·45
	1925–35	**2·11**	**3·70**	**8·81**	**16·37**	**31·00**
Oḍayáḷippaṭṭi ...	1906–17	1·53	3·30	12·85	13·60	31·28
	1925–35	**1·88**	**5·58**	**8·72**	**15·78**	**31·96**
Annavásal ...	1906–17	1·47	4·39	14·37	13·94	34·17
	1925–35	**2·14**	**4·13**	**11·39**	**17·04**	**34·71**
Ponnamarávati	1906–17	1·84	3·91	15·78	13·58	35·11
	1925–35	**2·22**	**6·36**	**14·41**	**16·89**	**39·87**
Adanakkóṭṭai ...	1906–17	1·57	2·85	13·86	14·82	33·10
	1925–35	**2·52**	**5·25**	**9·72**	**18·10**	**35·59**
Average for the State.	1906–17	1·63	3·62	14·25	13·73	33·23
	1925–35	**2·66**	**4·83**	**10·38**	**17·01**	**34·89**

* Faslis 1335 to 1344.

Season and rainfall.—The year may be divided into four distinct seasons. The first period January to March is relatively dry and cool. In the second, April to May, though more rain is to be expected, the heat steadily increases. The second half of the year comprises the two monsoons. Practically, the hot season extends from March to October, with occasional intervals

of rain, while the rainy season properly so-called extends over October, November and December, and sometimes into January. Such "cold weather" as there is sets in in December and lasts till March.

The rainfall varies remarkably from year to year. More rain is generally expected from the North-east than from the South-west monsoon, but statistics show that this expectation is by no means always realised. The total annual average for the State is nearly 35 inches. The year 1920-21 (Fasli 1330) records the high average of 60·44 inches, and 1934-35 (Fasli 1344) the very low average of 24·46 inches—Koḷattúr has the lowest average.

The average number of wet days in a year for the last five years 1931-35 is 70; so that the average fall per rainy day works out approximately to 0·5 inches. October and November have the highest average number of rainy days.

In March and April humidity is generally low. In May and June the scorching heat is occasionally relieved by thunder showers. In July, August and September—especially in August—there are sometimes heavy falls of rain. September shows a decrease, while in October and November the humidity is usually highest. In December and January rainfall is generally—but by no means always—scanty.

Temperature.—The temperature is officially recorded daily only at the Observatory at Pudukkóṭṭai Town. The annual mean for the five years 1931 to 1935 is 84·1° F. The lowest mean is 76·5° F. in December and the highest 90·8° in May. The mercury rose to 109° in the month of May in the years 1931 and 1934 and seldom fell below 60° throughout the period.

'In the cold and dewy months of January and February," to quote the late Mr. Chakrapani Iyengar, the State Meteorological Superintendent, "the dry minimum readings range from a little over 60° F. to 70° F.; and though there is a clear range of

variation of from 30° to 45° between the lowest and the highest reading in the year's course, yet such extreme cases pertain only to the second half of January and the first half of February. For the major portion ot the year the mean daily temperature is generally about its mean annual temperature. The range of temperature during the course of a day varies very greatly during the different seasons of the year. The range of daily variations is greatest in April or May and least in November or December."

Winds.—The South-west monsoon wind, popularly known as the west wind (மேல் காற்று), blows steadily from the middle of June to August. The northerly breeze of September—October shifts to the east when the North-east monsoon breaks. In January and February the wind blows from the east, and from March to June a southerly wind prevails (தென்றல்காற்று) till it again shifts round to the west with the setting in of the South-west monsoon.

Cyclones.—Thunderstorms usually occur in the Bay about the beginning and end of the monsoons. The following extract from Sir William Hunter's *The Imperial Gazetteer of India* (Volume I) will throw light on that important feature of the meteorology of the Indian Ocean—the cyclones which exercise so great an influence on the rainfall on the East Coast of Southern India.

" A considerable proportion of the wet monsoon (the south west monsoon is described as the 'wet monsoon' in India) rainfall over the greater part of India is due to the ascensional movement accompanying cyclonic storms. On the average eight storms of moderate to considerable intensity pass from the Bay of Bengal into India between June and September." (Only occasionally does the storm area come so far south in the peninsula as to cover the Pudukkóṭṭai State.)..............................
" After the Bay current has withdrawn from Northern India and Upper Burma, and is recurving over the Bay, it is directed

to the peninsula........................cyclonic storms occur at longer intervals, but continue to give large amounts of rain to the areas they pass over. Their path is, usually in the latter part of October and almost invariably in November and December, westward to the Circars and Coromandel coasts. (In October and the first half of November the precipitation occurs chiefly in the north Coromandel and Circars districts, and in the second half of November and December chiefly or solely in the south Coromandel coast)..The rainfall is heaviest in a narrow belt of the Coromandel coast, where it ranges between 20 and 30 inches, and decreases rapidly on proceeding into the interior."

Cyclones passing over Pudukkóṭṭai are sometimes accompanied by very heavy rainfall. One in October 1930 (for example) produced about 11½ inches of rain, one in December 1933 nearly 8½ inches and one in November 1935 about 8 inches in 24 hours.

In November 1893 as much as 27 inches were registered in 24 hours at some places in the State.

Earthquake.—A slight tremor was felt for a few minutes on the night of February 8, 1900; but no damage was done.

Economic Effects of Climate—Liability to Famine.—Of the various causes that formerly contributed to widespread distress—drought and flood, anarchy, war and misrule—the last three are—at least for the time being—suspended. Though the rainfall of the State does not differ materially from that of the adjacent areas, the risk of famine or scarcity is greater in the State, owing to the absence of rivers or canals affording a steady and continuous supply of water. The cultivation of the soil, which is the occupation of the majority, depends on an adequate total amount of rainfall distributed over all parts of the State, and occurring at suitable intervals. This last is a most important condition. One torrential downpour will fill the largest tanks,

and so far as they are concerned (if they do not breach) the season will be a good one. Hundreds of smaller tanks require two or three fillings at favourable intervals if the crops under them are to come to maturity.

Owing to the improvement and extension of communications by rail and road, famine—in the sense of an actual dearth of the necessities of life—is, it may be hoped, a thing of the past. Nowadays severe drought means—not a lack of supplies of grain and other necessaries of life but—a lack of money to buy them. The remedy for this (to which the State freely had recourse in the year 1935) is to open relief works, to enable the unemployed agricultural labourer to earn the money to buy grain. Such a situation also tends to stimulate emigration to Ceylon and elsewhere overseas.

Though the history of remote times sheds but little light on the subject, there is no doubt that in former times famines occurred frequently and disastrously. Heavy and vexatious taxation sometimes led in early times to the abandonment of whole villages, as for example, Madayáni in 1512. Again, the authority of the Central Government was often not effective in distant tracts, which were thus given over to plunder and bloodshed. The inroads of the Mussalmans in the fourteenth century led to the desertion of some villages, such as Rángyam and Ádanúr. The predatory excursions of the Kaḷḷars of Pudukkóttai into the neighbouring territory provoked reprisals which, when the injured party was powerful, were severe. In the 17th and 18th centuries, Pudukkóṭṭai had its full share of troubles arising out of the maelstrom of the Carnatic wars, till the English arms emerged triumphant. Situated between quarrelsome neighbours, and forced into war either in self-protection, or from considerations of prestige, or to fulfil its obligations, Pudukkóṭṭai was engaged in warfare at different times with the rulers of Tanjore, Madura, Mysore and Ramnad and with various rebel poligars.

An inscription in the Perumál temple at Ponnamarávati dated 1453 A.D. (Saka 1375) relates how dancing girls driven from their homes by successive famines in 1436, 1450 and 1451 A.D. came and accepted temple service in the village.

Another inscription at Mélúr dated 1465 A.D. refers to a famine due to drought in consequence of which the inhabitants of the village were forced to raise a sum of money for their subsistence by selling their *Pádikával* * rights to their neighbours at Rájasiṅgamaṅgalam (Ráṅgyam).

The letters of the Madura Mission furnish harrowing details of the suffering caused by the famines of the seventeenth and eighteenth centuries. The famine of 1655 was the occasion for the persecution of the Christians at Kandelúr accompanied by the depredations of an Abyssinian, Kanakhan † who entering the Tondimán territory slaughtered the men and outraged the women.

Perhaps the severest recorded famine in the State was that of 1708–1709 A.D. which is referred to in the inscription at Irumbánád, which tells of wasted lands and abandoned villages. From the letters of the Madura missionaries we learn that it was of such intensity that "the like the oldest among the living have never witnessed..................and everywhere along the roads and in the fields heaped up corpses or rather bleached bones are left unburied, amidst a people amongst whom funeral ceremonies could never be considered dispensable."

In 1733 there was a complete failure of rain, and this coupled with the wars of 1735 was responsible for the famine

* *Pádikával* means literally "the watchmanship of a village." It was "the right of protecting the people, their property and crops," exercised by the village assemblies.

† Kanakhan (Khan-i-khanan) was the general of Idalkhan the Adil-Shah of Bijapur. He invaded Mysore and the Carnatic "levied ransom on Tanjore and Madura and raised large contributions and returned to Bijapur full of riches."

which lasted from 1733 to 1736. The French war of 1754 which for days left "nothing but smoke and flames of fire everywhere" and the engagements with the Rajah of Tanjore in 1756 followed by rapine, plunder and distress accounted for a large migration of the population.

The first two famines recorded in the 19th century occurred in the reign of Raja Raghunatha, and were the result of drought. The Raja took prompt measures, for which he was congratulated by the Suzerain Power, opened feeding houses for the free distribution of food and gruel, and purchased and stored paddy in large quantities for the use of the poor. 1858 was another year of intense misery; there was no rain in the usual season while an unseasonably heavy fall in April caused damage to crops. 1866 and 1868 were years of even greater distress; rains failed entirely, tanks and wells dried up, and both *kálam* and *kódai* crops were failures, and the result was a large-scale migration from the State of ryots, traders and weavers. The State allowed a remission of Rs. 4,338—8—11, which in those days represented a large sum. In 1870 and 1871 the north-east monsoon failed and the wet crops never came to maturity. In the succeeding hot months drinking water became scarce. Rains were untimely in 1873 and totally failed in 1875. This series of bad years culminated in the far more serious calamities of 1876-1877. Owing to continuous drought, wet and dry crops alike failed. In December of the latter year, on the other hand, the rainfall was excessive and breached a number of tanks. Subscriptions were collected, and aid was sought from the English Charity Funds through the Madras General Committee. Famine works were started, and *conjeethotties* (gruel kitchens) were opened at the principal stations. There was again drought in 1879-80, and between 1889 and 1895 there was a period marked by intermittent scarcity, brought on as usual by the failure of the north-east monsoon. In 1890 and 1893 prices 'touched famine point.' In 1895, drinking water was again insufficient: Koḷattúr suffered in particular, and relief

works were ordered 'on an extensive scale.' In 1898 again, relief works were found necessary; and the 'trimming' of the Agniàr, the excavation of a drinking water *ùrani* at Nàrttàmalai, and extensive repairs to the Kolattúr tank afforded help to the unemployed.

The first four years of the present century were years of continued prosperity, unhappily terminated however by the drought of 1904–5, due once more to the failure of the north-east monsoon. In many places no attempt was ever made to sow paddy, and where it was sown, the seedlings died even before transplantation. The poor people of Tirumayam were able to get some work in the Chetti villages; the people of Àlangudi carried on some cultivation under wells, but as usual Kolattúr "fared the worst of all, even good drinking-water having failed in most places." In 1907–8 public relief works were opened, since conditions were so bad as almost to deserve the name of famine, and in 1909–10 again "the eastern-most firkas of Kolattúr and Àlangudi and the south-east corner of Tirumayam suffered, and irrigation works were started to give relief."

The great war of 1914–19 was responsible for generally high prices, especially for imported articles such as piece-goods, kerosene and glass.

In the years 1916 and 1918 the North-east monsoon failed. The years 1924 to 1930 were one continuous period of drought. The Darbar first tried to ease the situation by granting loans to ryots to enable them to sink wells and buy cattle and seed. The collection of kist was postponed. In 1927, the Regent granted a remission of land revenue to the extent of a lakh of rupees (the first instance of remission being granted after the introduction of the new settlement rates), and the collection of kist amounting to another lakh was postponed. In 1928 the remission granted amounted to more than 2 lakhs. Repayment

by ryots of Government loans, was suspended and interest on such loans remitted. In 1929, the collection of arrears of land revenue was ordered to be made in six months instead of four, and that of the current year's kist was spread over eight months.

The drought experienced in 1934—35 (Fasli 1344) was one of the major calamities with which the State has been visited. "The rainfall", to quote the Administration Report, "was so insufficient during the cultivation season that crops were not raised at all, or, if raised, failed in most parts of the State." In addition to the concessions granted on previous occasions, a remission of 50 per cent of the assessment was sanctioned on wet lands that either had been left uncultivated owing to the shortage of water, or if cultivated, had failed to yield a four anna crop. The total remission granted during the fasli was Rs. 2,62,518. Recovery of instalments of agricultural loans due during the fasli was suspended. The land revenue was collected in six instalments instead of four. Distraint of cattle for the recovery of land revenue was prohibited. The drought caused unemployment on a large scale among agricultural labourers. To relieve this the Darbar opened numerous relief works which mostly took the form of repairs to the bunds of irrigation tanks. The Darbar also took measures on a large scale to provide drinking water in villages where necessary.* Labourers on the relief works were required to turn out three-fourths of the task that they would have turned out in ordinary times, and were paid daily wages at 3 annas for a man and one and a half annas for a woman or child. If, however, the outturn was equal to the 'ordinary' task, they were paid at four annas and two annas respectively. By the end of June 1937, a sum of Rs. 3,63,672 had been spent on relief works.

* There are now 746 Government drinking water wells in the State.

The following statement shows the number of relief works completed or in progress at that time—

	Particulars of works.	Numbers.
1.	New wells	331
2.	Repairs to old wells ·	110
3.	Tanks—minor	257
4.	Tanks—major	21
5.	*Ūranies*	19
6.	Roads	10
7.	Bore wells (*a*) New wells bored	4
	(*b*) Bores sunk in old wells and repairs to old bore wells.	21

Floods.—Cyclones from the Bay of Bengal sometimes cause serious inundations. The earliest flood in the State of which we have any record is that of 1709, which contributed to the great famine of that year. Nearly all the tanks burst, and the standing crops were destroyed. Exactly a century later, in 1809, there was a similar flood resulting in similar devastation. In 1827 a 'terrific' hurricane occurred, and in December 1877 a number of tanks breached. In the middle of December 1884 there was a record fall of 7 inches in a single day. Several bridges were irretrievably damaged—the Peruṅgaḷúr Bridge, the biggest in the State, was entirely washed away, the Kuṇḍàr Bridge was undermined, and the Pàmbàr Bridge, further south was swept away. No less than 239 State tanks were seriously breached, and the cost of repairing the damage done was estimated at Rs. 36,163 for bridges, and Rs. 33,360 for tanks. The 14th and 15th of December 1888 were cyclonic, and in October 1890, an unprecedented downpour of 7·61 inches breached tanks and sent a flood across the country. On November 22, 1893, there was torrential rain varying from 12 to 27 inches in different places, and a flood of unprecedented dimensions ensued, breaching nearly all the tanks and roads, damaging the crops and rendering the movement of traffic impossible.

The heavy rains of 1919 were very injurious to the crops then in ear. In November 1920 and January 1921, occurred some of the heaviest rainfall within living memory. The bridge across the Periyàr on the Karambakkuḍi road, and the causeways across the Veḷḷàr on the Kaḍayakkuḍi and Tirumayam roads, were washed away. The very heavy fall of 23·3 inches in October 1930 breached a number of tanks with results disastrous to agriculture.

Resume.—It is evident that to ensure a good harvest in the State, there should be occasional rain in August and September, and frequent and plentiful falls in October and November. But unfortunately the rainfall on the South Madras coast at this season occurs almost entirely in connection with storms in the Bay, and is therefore extremely irregular in its distribution and often untimely. A series of bad years, due to either excessive or deficient rain, leaves the ryot destitute of grain or money. There is grain for the buying, but since he cannot earn wages the labourer cannot buy it. He has no subsidiary industry to fall back upon ; too often he lacks the initiative and perseverance of the Salem and Coimbatore ryots or of the Udaiyars in the State itself, who even in a bad season will manage to raise a few crops under wells. The Darbar's present policy is to encourage the ryot by the offer of loans on easy terms to sink wells for irrigation, to sink numerous wells to supply drinking water, and to improve the irrigation tanks and *úranies*. The State is exceptionally well supplied with roads which facilitate marketing. The resources of the Darbar however are not unlimited. The ryots must learn to help themselves, and individually or in co-operation to start subsidiary occupations, and undertake protective works such as the digging of irrigation wells which will render them less dependent than they now are on the caprices of the seasons. It is the earnest hope of the Darbar that the scheme of rural improvement which they are now initiating will gradually educate the ryots to help themselves and each other.

CHAPTER II.

I. FLORA.*

Ecology.—The vegetation of the State is not markedly distinct from that of the adjoining British districts. The ecological factors or conditions that operate and affect the nature and distribution of the vegetation, are chiefly temperature and moisture, the latter being the most active agent as regards distribution of plants. The low average rainfall, not well distributed throughout the year, the intense heat, the conformation of the country, and its geographical position (very near the equator in the tropical zone), and other atmospheric and edaphic conditions determine to a great extent the facies of the vegetation.

The rainfall is scanty and precarious; the average rainfall for the past ten years being 35·9″. Even this average is not uniformly reached. For instance, the average for the five years ending with Fasli 1339 was 30·4″; whereas the average for the five years ending with Fasli 1344 was 41·4″. The range of variation in rainfall is from about 20″ to about 41″. The two monsoons, the South-West and the North-East, prevail during the second half of the year; the State is usually benefited more by the latter than by the former of these.

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* **Flora.**—The names of the plants described are according to the "Flora of the Madras Presidency—Gamble." The classification and, to a certain extent, the descriptions given in that work have been followed.

The Appendix giving a list of the common and economic plants is drawn up on the same lines as that to be found in the "Manual of the Tanjore District" with slight modification of the tabular heads.

The general floristic description to some extent follows the "Imperial Gazetteer of India,—Hunter: Vol. IX, Madras Presidency, and Vol. I Indian Empire—Descriptive—J. D. Hooker."

Coupled with the low rainfall, the State experiences intense heat during the greater part of the year. In conformation the surface may be described as mainly flat or slightly undulating, dotted here and there with low hilly ranges or isolated hills. The highest and longest ranges of hills lie close to the boundary of the State. The State is situated in the tropics, lying between 10°7′ and 11°4′ North Latitude, at a distance of twelve miles from the coast at the nearest point. The capital town is 317·53 feet above sea level. The maximum day temperature in the shade during the summer months is sometimes as much as 109°. F.; the temperature during the cool or rainy months does not fall below 64°. F. The average annual temperature is about 90°. F.,—6 or 7 degrees above that of the adjoining districts of Trichinopoly and Madura. The dry winds that prevail during the hotter months, when humidity is as low as about 30 per cent, increase the dessicating effect on the vegetation; the highest humidity in the cool and rainy months is 65 per cent.

The Edaphic factor, i.e., the nature of the soil, combines with the other factors to determine the facies of the vegetation of the various localities. For instance, the hard clayey soils of the red or yellow variety in the conglomeratic laterite beds are covered mostly with a particular type of plant association, of which the predominant species are *Dodonaea viscosa*, and the dwarf mimosa (*Albizzia amara*). Here the surface of the soil is covered with thin layers of grit and sand collected by wind action. Where there is no such superficial layer on a hard laterite bed, the vegetation occurs only in the cracks or fissures. In the State the soil is mainly of the ferruginous type; the red variety predominating in the drier localities. Black cotton soil is very rare, and met with only in the wet fields. Alluvium of the true type is scarce, except for a type of soil not strictly alluvial in the black loam of wet lands, in the beds of the irrigation tanks, and in the neighbourhood of streams. Here thrive the more mesophytic types of vegetation. On the hard

laterite beds, and on the sandy porous soils with a low retentive capacity, an almost xerophytic vegetation obtains. The characteristic xerophytic plants, with reduction or modification of foliage to suit the environment, that are met with are *Parkinsonia aculeata*, *Opuntia dillenii* now much reduced by the *cochineal* insect, *Caralluma umbellata*, *Aloe vulgaris*, *Caralluma adscendens*, *Cereus hexagonus* (an exotic found in hedges), *Euphorbia antiquorum*, *Euphorbia tirucalli*, etc. The sandy tracts are the places where the Casuarina thrives in the State; for its acicular foliage is adapted to resist excessive dessication. Saline soils are also to be met with in parts of the State, especially in some tracts in the Tirumayam Taluk.

Vegetation.—In general the floristic features of the State may be said to range from the mesophytic to the xerophytic types. As Sir W. Hunter remarks in the Imperial Gazetteer of India, the hot season in India has much the same effect on the vegetation as winter has in a temperate climate. Herbaceous plants wither and disappear, trees and shrubs shed their leaves, and in many cases the young foliage remains in the bud till quickened by the rain. When the rain does come the effect is almost magical. In less than 24 hours the scorched brown plain is carpeted with green, and the bare trees are quickly mantled with the young leaves. At the same time animal life is stirred into activity. Sportive insects hover over newly opened flowers; swarms of frogs render nights hideous by their incessant croaking and every ditch, pool and tank teems with fish. During the hot season the vegetation is burnt up, many trees are leafless and the aspect of the country is dreary in the extreme. The silence of the sparse jungle is only broken by the discordant noise of the *cicala*, the *tuk-tuk* of the barbet (*Xantholaema indica*), the screech of the kite, or the melancholy whistle of the drongo-shrike.

The scrub jungles contain mostly perennial shrubs reaching not more than 10 feet or so in height, forming a tangled growth that is sometimes impenetrable. Thorny plants are common. The ramification is generally very dense and the shrubs tend to

assume a compact or rounded form. On the level and low lying portions of the jungles there is a thick growth of *Memecylon edule*, which is hardly penetrable, and overhead are standards of *Mimusops hexandra*, *Pterospermum suberosum*, *Albizzia amara*, *Atalantia monophylla*, *Ixora parviflora*, and at higher levels there are *Wrightia tinctoria*, *Azadirachta indica*, *Bassia latifolia*, *Pongamia glabra*, *Zizyphus jujuba*, *Z. leucopyrus*, and *Carissa carandas*. Among the commoner shrubs may also be mentioned *Dichrostachys cinerea*, *Gmelina asiatica*, and in places *Erythroxylon monogynum*.

In the open tracts the undergrowth consists largely of prickly-pear, and the standards of *Acacia latronum*, *A. planifrons*, and *Albizzia amara*. Herbaceous flora also prevails in the wooded and moist regions.

In the open deforested, cultivated or semicultivated plains and the neighbourhood of tanks and streams, a varied mesophytic vegetation of herbs, and grasses thrives where the soil can retain some water. These areas are luxuriant in the rainy and cool months, but more or less bare during summer. Most of the plants are annuals; a few are perennials. The herbaceous flora is largely made up of plants belonging to the families, *Capparidaceae, Malvaceae, Tiliaceae, Zygophyllaceæ, Leguminosae, Lythraceae, Onagraceae, Euphorbiaceae; Rubiaceae, Aizoaceae, Amarantaceae, Nyctagineae, Compositae, Cucurbitaceae, Verbenaceae, Labiatae, Convolvulaceae, Acanthaceae, Scrophulariaceae, Violaceae, Boragineae, Pedalineae, Commelinaceae, Gramineae, and Cyperaceae.* The representative genera of the above families are *Gyandropsis* and *Cleome; Sida* and *Abutilon; Corchorus; Tribulus; Tephrosia* and *Crotalaria; Ammania; Ludwigia; Euphorbia, Acalypha*, and *Phyllanthus; Oldenlandia; Trianthema* and *Mollugo; Amarantus, Achyranthes* and *Gomphrena; Boerhaavia; Tridax, Eclipta, Vicoa, Blumea*, and *Vernonia; Citrullus, Cephalandra*, and *Cucumis; Lippia*, and *Stachytarpheta; Leucas*, and *Anisomeles; Ipomaea, Evolvulus; Ruellia, Rungia*, and *Justicia; Striga, Stemodia Dopatrium*, and *Limnophyla;*

Ionidium; Trichodesma, and *Heliotropium; Pedalium* and *Sesamum: Commelina* and *Cyanotis; Panicum,* and *Eleusine; Cyperus* and *Fimbristylis;* in the order of the families above mentioned.

The plantations of Casuarina have improved the aspect of the country by clothing the sandy tracts with luxuriant forests; but they also have a beneficial effect on climate and vegetation in the neighbourhood. The most important sand-binding plants are *Ipomaea pes-caprae, Launea pinnatifida, Tridax procumbens, Pupalia atropurpurea,* and *Canavalia obtusifolia.* The Screw Pine (*Pandanus*) is abundant on the banks of rivers.

The forests are of the deciduous type usual in tropical regions where the dry season is protracted. The trees shed their leaves and remain wholly or partly bare for a longer or shorter period during the dry weather. The leaves that remain during that season sometimes develop a reddish tint. The herbs on the floor of the forest are generally tall and climbers are common. The whole vegetation is comparatively thin-leaved.

The area occupied by the forests and jungles forms roughly about one-eighth of the area of the State; the number of such tracts is more than sixty, but none of them is very extensive. The State seems to have been once wholly covered with forests as the names of various places such as Kánáḍu, Mángáḍu, and Vadagáḍu indicate. At present there are about 100 square miles of forest area, of which 63¼ square miles are 'Reserves.' Four reserve forests with an area of 32 square miles are special game-preserves. The names of the reserved forests are:—

1. The Town forest—(comprising Periavalai kattu to the east, and Chinnavalai kattu to the north—14 square miles).
2. Sengírai forest—about 17 square miles.
3. Pulvayal, Vayalógam and Parambukádu forest.
4 Nárttámalai forest.

5. Tiruvarangulam forest.
6. Váráppúr and Sákkilánkóttai forest which are small areas.

The Town, Nárttámalai, Tiruvarangulam and Pulvayal forests are special game preserves for the use of His Highness the Raja. Forest lands or scrub jungles are also to be found near Piránmalai, Ammankuruchi, Maravámadurai, Lambalakkudi, Kannanúr, Kónápet, Irumbánádu, Vennávalkudi, Chóthupálai, Ádanakkóttai, Killukóttai and Perambúr.

The forests contain a considerable variety of trees and shrubs typical of the dry deciduous forests of Southern India. Among the commonest trees and shrubs the following may be mentioned. *Dalbergia latifolia*, *Albizzia amara*, *A. lebbek*, species of *Acacia*, (*A. leucophloea*, *A. catechu*, *A. planifrons* and *A. latronum*) *Canthium parviflorum*, *Memecylon edule*, *Hiptage madablota*, *Zizyphus jujuba*, and *Z. oenoplia*, *Pterospermum suberifolium* and *P. heyneanum*, *Terminalia belerica* and *T. catappa*, *Cassia nodosa*, and other species of *Cassia*, *Sapindus emarginatus*, *Mimusops hexandra*, and *M. elengi*, *Chloroxylon swietenia*, *Strychnos nux vomica*, *S. potatorum*, *Anacardium occidentale*, *Gyrocarpus jacquini*, *Bassia latifolia*, *Gmelina asiatica*, *Crataeva religiosa*, *Pongamia glabra*, *Randia dumetorum*, *Dichrostachys cinerea*, *Tamarindus indica*, and *Erythroxylon monogynum*.

Among the Palms that grow in the plains, jungles, and waste lands may be mentioned *Borassus flabellifer* (Palmyra) which occupy the open tracts in large numbers. *Phœnix sylvestris* (Date palm) also is widely distributed. The important cultivated palm is *Cocos nucifera* (Coco-nut). Most of these palms are tapped and yield an annual revenue to the State.

Many plants found in the State are of economic importance, and though few trees in the forests are of any value as timber, some—such as *Casuarina*, *Albizzia amara*, *Tamarindus*, etc.,—are of value as fuel. The timber trees are never large and seldom sound. Partial exceptions are perhaps, *Pterospermum*

in the Nárttámalai and Sengírai forests. Bamboo does not thrive in the State though it occurs in some places. Among the herbs and shrubs many find a place in the indigenous pharmacopœa. Plants mentioned as officinal in the British pharmacopœa and found in the State are *Aristolochia sp.*, *Citrus sp.*, *Aegle marmelos*, *Acacia arabica*, *Cassia fistula*, *Tamarindus indica*, *Pterocarpus santalinus*, and *P. marsupium*, *Hemidesmus indicus*, *Datura fastuosa*, *Strychnos nux vomica* *Citrullus colocynthus*, *Ricinus communis*, *Capsicum minimum*, and *Aloe vera*. The Nárttámalai forests are especially noted for such plants of medicinal value.

Plants yielding dyestuffs, fibres, and tanning materials are also found in the State. Many plants and grasses are of value as fodder for cattle and many are used as manures. The plants of fodder value are *Cynodon dactylon*, *Eragrostis diarrhena*, *Chloris barbata*, *Aristida setacea*, *Ischaemum rugosum*, *Vetiveria indica*, *Eleusine indica*, *E. coracana*, *Paspalum scrobiculatum*, *Pennisetum cenchroides* (*Cenchrus echinoides*) *Panicum maximum*, *P. repens*, *Andropogon shorgum*, *A. pumilus*, *Oryza sativa*, *Setaria italica*, *Digitaria sanguinalis*, etc., among grasses, and *Pithecolobium dulce*, *Sesbania grandiflora*, *Erythrina indica*, *Albizzia amara*, etc., among others.

Many plants serve as green manure; some of them are *Cassia auriculata*, *Dodonaea*, *Tephrosia*; *Calotropis*, *Morinda*, *Azadirachta*, *Memecylon*, *Cissus*, *Thespesia* and *Chloroxylon*.

Some wild plants yield edible fruits such as *Zizyphus*, *Mimusops*, etc. But the State is famous for two types of good fruit, graft mangoes, and jack-fruit. *Artocarpus integrifolia*, the jack, is abundant in some parts of the State such as Maḷayúr, Alanguḍi and Karambakkuḍi and yields very large fruit with edible flakes.

A list of plants with their vernacular names, short descriptions and particulars of their uses is appended.*

* *Vide* Appendix.

The Cryptogamic flora of the State has yet to be studied. Among the macroscopic cryptogams that are commonly to be found are the water ferns—*Marsilia* (order *Hydropteridinae*) which have four leaflets, and long stolons, commonly found in ditches and shallow pools containing fresh water. Ferns of the genera *Adiantum, Aspidium* and *Asplenium* are met with as pot plants in gardens. Among the large fungi are the Agarics (*Agaricaceae*) and the bracket-fungi (*Polyporaceae*)—the former to be met with on rotting humus or vegetation and the latter on trunks of trees. The floating scum on the fresh waters of the State comprises among other algae, *Spirogyra,* and *Oedogonium,* belonging to the *Chlorophyceae* or green algæ, *Oscillaria,* and *Nostoc* belonging to the *Cyanophyceae* or blue-green algæ. *Chara,* another fresh-water shrub-like branching alga, is found submerged in the clear water of many tanks. It is interesting to note that the permanently greyish-yellow coloured water that is found in many tanks does not usually contain any submerged vegetation; the algæ, if any, are floating forms, forming a scum on the surface. It is also reported by the tank watchmen and Inspectors that the introduction of these submerged weeds, especially *Chara,* into water which has become yellow owing to suspended clay during freshes, makes it clear in a short time.

II. FAUNA *

The fauna of the State has not yet been completely studied, and no attempt is made here to give a complete account of it; only the animals commonly met with or collected and exhibited in the State Museum, are described.

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* **Fauna.**—The running matter follows the "Imperial Gazetteer of India—Hunter Vol. IX, Madras Presidency and Vol. I Indian Empire Descriptive—by W. T. Blanford."

The general arrangement of the Phyla and orders follows the same book and also the "Fauna of British India."

The classification of Birds is according to the modern trinominal nomenclature of Stuart Baker.

The classification of Insects has been brought up to date and Fletcher's Hand Book has been followed.

Since the State is situated in the lower half of the Peninsula, its fauna is naturally "Oriental" in type, and resembles that of the other plains districts of South India where conditions are similar.

Mammals.—The one peculiar type of mammal that characterises the peninsula is the Slender Loris, a primate which is found also in the State. Among other genera characteristic of Southern India, the State does not possess the elephant, the wild dog, the muntjac, or the nilgai. On the other hand it shares in common with the other parts of the peninsula some animals which are characteristic—the long-tailed monkey, the civet, the palm-civet, and the antelope.

PRIMATES.—Primates other than man and the anthropoid apes, are the monkeys, belonging to the sub-order *Cercopithecidæ;* and the lemurs belonging to the *Lemuroidae.* Of the former the State possesses one genus, the long-tailed Grey Monkey (*Macacus*) which abounds in the villages and forests. The other kind of long-tailed monkey commonly called the Langur or Hanuman is also not uncommon (*Seminopithecus*). Both are very active little primates living in large flocks, and are chiefly arboreal though descending to the ground often for food.

The Lemuroids are represented by the Loris (*L. gracilis*), or Slender Lemur. This animal is peculiar to S. India, as is another genus to the countries east of the Bay of Bengal, while the majority of the world's lemurs are confined to the island of Madagascar. This is a little primate chiefly arboreal, nocturnal and very slow in movement, feeding on leaves and fruits of trees, insects, birds-eggs and small birds.

CARNIVORA.—The first family of this order of mammals is the *Felidae,* or cats. The larger cats, such as tigers, leopards and lions are not found in the State. This family is however represented by other species, the largest being the Jungle Cat (*Felis chaus*); the other wild cat, the Rusty Spotted Wild Cat (*F. rubiginosa*), also appears to be not uncommon.

5

A stray leopard has been killed near Tiruvarangulam, and its skeleton is exhibited in the State Museum. Leopards or cheetahs are not however to be found in the forests of the State. The commonest member of the family is the Domestic Cat (*F. domestica*) of our towns and villages.

The *Viverridae*, another family of the carnivora, comprises two groups or sub-orders the *Viverrinae* and the *Herpestinae* including the Civets and Mungooses. The *viverrinae* are represented by the Lesser Civet (*Viverricula malaccensis*). The other Civet called the Spotted Tiger Civet (*Prinodon pardicolor*) is often domesticated. These are somewhat arboreal animals, living partly on other small animals and partly on fruits and roots. They yield the drug known as 'Civet.' Another genus of this group, the Palm Civet or Toddy-Cat (*Paradoxurus niger*) is also found in the woods and owing to its nocturnal habits is rarely seen or reported. It has a long tail, is grey and black or brown in colour, and lives on small animals, birds, lizards and insects, and also on fruits and vegetables.

The *Herpestinae* include one genus, which is found here; the common Mungoose (*Herpestes mungo*) renowned as the deadly enemy of snakes.

The family *Hyaenidae*, includes the striped Hyæna, (*Hyaena striata*), said to have been seen in the State Forests at times, but now certainly very rare if not extinct here.

The family *Canidae*, or dogs and their allies, are not represented by the bigger canines such as the wolf. The wild representatives of the *Canidae*, are the Indian jackal (*Canis aureus*), the common scavenger of the towns and villages near forests or jungles, feeding on carrion and offal of all kinds, but also occasionally killing small animals such as poultry. The other representative of the group is the Indian Fox (*Vulpes bengalensis*) a small greyish animal with a black tip to its tail, common in the forests of the State. The common pariah-dogs are mongrels and are different breeds of *Canis familiaris*.

INSECTIVORA.—Amongst Insectivora the sub-order *Erinœidœ* includes the one well-known genus, the South Indian hedgehog, (*Erinaceus micropus*). These animals are of the size of a big rat with white or yellow spines all over the body and when disturbed roll into spiny balls. The other suborder *Soricidae* includes the shrew or musk-rat, common in houses, and in the open near jungles. They are useful as insectivores. Two species of the genus *Corcidura*, the brown Musk-Shrew (*C. murina*), and the Grey Musk-Shrew (*C. Caerulea*) are common.

CHIROPTERA.—This order includes the bats of which there are many genera small and large to be found in the State. The specimens collected and exhibited in the State Museum are representative of all the four families of this order. The family *Pteropodidae*, the fruit-eaters or flying-foxes, includes the largest of the bats, all of them arboreal. Two genera, the Flying-fox, or Fruit-Eater Bat, (*Pteropus medius*) and the Short-nosed Fruit-Bat (*Cynopterus marginatus*) are common. The family *Rhinolophidae*, is represented by the Schneider's Leaf-nosed Bat, (*Hipposiderus speoris*); the family *Nycteridae*, by the Indian Vampire Bat (*Megaderma lyra*); the *Vespertilionidae*, by the Hairy-winged Bat (*Harpyiocephalus harpyia*); and the family *Emballonuridae*, by two genera, the Black-bearded Sheathtailed Bat and the Long-tailed Bat, (*Taphozous melanopogon*, and *Rhinopoma microphyllum*).

RODENTIA.—The animals belonging to this order are the squirrels, hares, rabbits, porcupines and rats. Almost all of these are common; they fall under four families. The *Sciuridae* include the common squirrels (*Sciurus palmarum*), the Palm Squirrel with longitudinal stripes on its back, the Large Indian Squirrel (*Sciurus indicus*) and the Large Brown Flying Squirrel (*Pteromys oral*) which dwells in trees, living in holes during the day and coming out for food at night.

The family *Muridae*, includes the rats and mice. Among the rats (Genus *Mus*) the most common variety is the *Mus rattus*, or common Indian house-rat. The other cosmopolitan rat

of world-wide distribution is the Brown Rat (*Mus decumanus*), which is not indigenous to India but has its native home in Chinese Mongolia. The other species of rat which inhabits open places and fields is the Soft-Furred Field-Rat (*Mus mettada*). The common House Mouse is *Mus musculus*. Other genera of rats are the Indian Gerbil or Antelope-rat, (*Gerbillus indicus*) and the Indian Mole-Rat, (*Nesocia bengalensis*) a more robust rat, common in rice-fields, gardens and cultivated land. Another species of Nesocia is *N. bandicota* the common Bandicoot, a very large rat common in or near houses. The Bush Rat (*Golunda elliotti*) also belongs here. This lives in jungles, making its nest in bushes; its body is covered with stiff hair.

The family *Hystricidae* includes the porcupines. The common Indian porcupine (*Hystrix leucura*) is now found but rarely in the State forests.

The last family *Leporidae* is composed of the hares and rabbits, and is represented here by the common South Indian Hare or Black-naped Hare (*Lepus nigricollis*).

UNGULATA.—The Indian wild or indigenous genera of this order of mammalia are very few in this State. The sub-order *Proboscidea* includes the Elephant (*Elephas maximus* or *indicus*) which does not occur wild. The other sub-order *Ungulata vera* is also not well represented. The *Perissodactyla* or odd-toed ungulates are likewise represented by the domesticated Horses, and Asses (*Equus spp.* of the family *Equidae*) that are in no way indigenous, though common in large numbers under domestication.

The even-toed *Artiodactyla* include cattle, sheep, goats, antelope (*Bovidae*), deer (*Cervidae*) and boar (*Suidae*). There are no local breeds of cattle or buffaloes and no truly wild cattle or buffaloes in the State. The same is true of sheep and goats.

The common sheep and goats of the State are called in Tamil *Velládu, Semmariyádu* and *Kurumbádu*, the last being a breed reared by the *Kurumbá* tribes of the State.

Among the antelopes, the buck or true Indian antelope (*Antelope cervicapra*), and the spotted deer (*Cervus axis*), which belongs to another family *Cervidae*, are found in the forests of the State.

The *Suidae* comprise the boars, of which the wild boar *Sus cristatus* is to be found in the forests. The domesticated pig, *Sus indicus*, is bred in large numbers by the *Koravars*.

EDENTATA.—The last order of the mammals including the Pangolins is represented locally by the Indian Pangolin (*Manis pentadactyla*) or Scaly Ant-eater which is covered with large imbricate horny scales, and resembles a reptile rather than a mammal. It lives chiefly on ants, which it takes in by its long sticky filamentous tongue.

Aves or Birds.—The avi-fauna of the State resembles that of the Southern part of Madras Presidency in which it lies; a large number of the genera represented consist of species that are commonly found in the Oriental region. The most striking families are the gallinaceous birds, pigeons, parrots, cuckoos, woodpeckers and barbets, bee-eaters, sun-birds, mynas, king-crows, crows, kites and falcons, all common in S. India.

A representative collection of the birds found in the State, is exhibited in the State Museum.

Members of almost all the orders of birds are found in the State at some season or other of the year, the largest being the Perchers, the Fowls, and the Ducks and Geese.

PASSERES OR PERCHERS.—There are about 20 families under this order, of which about 13 are well represented. The most common is the family *Corvidae*, including the crows, the magpies, and ravens. The most familiar member of this family is the Indian House-Crow (*Corvus splendens splendens*), the common scavenger of the country and abundant in every village and town. Another crow is the Black Jungle-Crow (*Corvus coronoides levaillanti* or *C. macrorhyncus*) which keeps chiefly to forests and wild tracts. Another genus is the Indian Tree-Pie

(*Dendrocitta rufa or D. vagabunda*) with a sooty colour, a short black bill and stiff hairs at the base of the bill.

The *Turdoididae* include the laughing-thrushes and babblers (Seven sisters). Of these the S. Indian Jungle-Babbler (*Turdoides terricolor malabaricus*) and the White-headed Babbler (*Turdoides griseus griseus*), Jerdon's Chloropsis (*Chloropsis jerdoni*), the White-browed Bulbul (*Pycnonotus luteolus*), the Southern Red-whiskered Bulbul (*Otocompsa emeria fuscicaudata*) and the common Iora (*Aegithina tiphia tiphia*), are common.

The family *Laniidae*, or Shrikes or Minivets, is represented by the South-Indian Rufous-backed Shrike (*Lanius schach caniceps*), and the Indian Grey Shrike (*Lanius excubitor lahtora)*, the Small Minivet (*Pericrocotus peregrinus peregrinus*), the Cuckoo-Shrike (*Campophaga sykesii*) and the Common Wood-shrike (*Tephrodornis pondicerianus*).

The Indian Oriole (*Oriolus oriolus kundoo*) is the only common representative found here of the family *Oriolidae.*

Among the *Sturnidae* or Mynas may be mentioned the Grey-headed Myna (*Sturnia malabarica malabarica*), the rose-coloured Starling (*Pastor roseus*), the common Myna (*Acridotheres tristis tristis*), and the Black-headed Myna (*Temenuchus pagodarum*).

The King-crows (Drongs-Shrikes) or *Dicruridæ* characterised by their long forked tails and black plumage are represented by the genus *Dicrurus* (*D. annectens annectens* and *D. macrocercus macrocercus*).

The Paradise Fly-catchers (*Terpsephone paradisi paradisi*) of which the immature and females are black and chestnut, while the mature males are white and long-tailed, belong to the family *Muscicapidae.*

The *Turdidae* comprise the Bush-chats, Robins, Thrushes and Blackbirds, of which the South Indian Pied Bush-chat (*Saxicola caprata atrata*), the Indian Magpie-Robin (*Copsychus saularis saularis*), the well-known songster Shama (*Kittocincla*

macroura macroura), and the migratory ground-thrushes, namely the Orange-headed Ground Thrush (*Geocichla citrina citrina*), and the White-throated Ground Thrush (*G. c. cyanotis*) are found here.

The *Ploceidæ* comprise the Weaver-birds and Munias. Of these the Indian Striated Weaver-bird (*Ploceus manyar flaviceps*) which builds curious flask-shaped grass nests, with a long tubular entrance, hanging from trees or bushes, is the more common.

The Finch family or *Fringillidæ*, the Indian genera of which are confined to one sub-order including the Sparrows, etc., is represented by the common House-Sparrow (*Passer domesticus indicus*) and the Yellow-throated Sparrow (*Gymnoris xanthosterna xanthosterna*).

Of the Swallows, *Hirundinidae*, the most common are the Eastern Swallow (*Hirundo rustica gutturalis*) and the Nilgiri House-Swallow (*H. r. javanica*).

The Pipits and Wagtails combine to form the family. *Motacillidae*, of which the more common birds seen in the State are the Grey-headed Wagtail (*Motacilla flava thunbergi*), the Large pied Wagtail (*Motacilla alba maderaspatensis*), and Richard's Pipit (*Anthus richardi richardi*).

The Larks, *Alaudidae*, are represented by one common genus, the Ashy-crowned Finch-Lark (*Pyrrhulauda grisea grisea*)

Of the sunbirds, *Nectariniidae*, there are three common genera, the Purple Sunbird (*Cyrtostomus asiaticus asiaticus*), the Purple-rumped Sunbird (*Cyrtostomus zeylonicus*) and Tickell's Flower-pecker (*Dicaeum erythrorhyncum*).

The family *Pittidae* includes the handsome Pittas living on the ground in woods and forests. One common species is the Indian Pitta (*Pitta brachyura*).

PICI.—This order comprises two families the *Picidae* or Wood-peckers, most commonly represented by the Golden-backed Wood-peckers (*Brachypternus aurantius aurantius* and *B. a.*

puncticollis) and the *Indicatoridae* or Barbets, a typical example of which common in the State is the Indian Crimson-breasted Barbet (*Xantholæma hæmocephala indica*).

ANISODACTYLI.—This order includes five sub-orders the Rollers (*Coraciae*), Bee-eaters (*Meropes*), King-fishers (*Halcyones*), Hornbills (*Bucerotes*) and Hoopoes (*Upupae*), all of which except the *Bucerotes* are common.

Of the *Coraciae*, the family *Coraciidae* has one representative in the Southern Indian Roller (*Coracias benghalensis indica*), also commonly called the Blue Jay, conspicuous by its blue plumage and common about gardens, where it hawks insects and sometimes lizards and mice. This is not allied to the true Jays.

Of the *Meropes*, the family *Meropidae* includes the Slender-billed Blue-tailed Bee-eater (*Merops superciliosus javanicus*).

Among the *Halcyones*, the family *Alcedinidae* includes such very common forms as the common Indian King-fisher (*Alcedo atthis benghalensis*), and the White-breasted King-fishers (*Halcyon smyrnensis smyrnensis* and *H. s. fusca*).

Upupae include the family *Upupidae* of which the Indian Hoopoe (*Upupa epops orientalis*), is an example.

MACROCHIRES.—This order includes the Swifts (sub-order *Micropodes*) Nightjars (s. o. *Caprimulgi*) and Frogmouths (s. o. *Podargi*). Of these the Common Indian Nightjar (*Caprimulgus asiaticus*) belonging to the family *Caprimulgidae* and the Palm Swift (*Tachornis batassiensis batassiensis*) of the sub-order *Micropodes* are common.

COCCYGES.—The Cuckoos and Koels belong to the family *Cuculidae* of this order. The members of this family are parasites, laying their eggs in the nests of other birds. Commonly found here are the Common Hawk-Cuckoo (*Hierococcyx varius*), which resembles the birds of prey even more than other cuckoos do, the Indian Plaintive Cuckoo (*Cacomantis merulinus passerinus*), belonging to the *Cuculidae*, the Indian Koel (*Eudynamis scolopaceus scolopaceus*), a frugivorous cuckoo

the male of which is glossy black and the female brown and spotted, the Small Green Malkoha (*Rhopodytes viridirostris*) and the Southern Crow-Pheasant (*Centropus sinensis parrotii*), belonging to the *Phœnicophainæ*.

PSITTACI.—This includes the Parrots, the Paroquets and Loriquets. In the family *Psittacidae* are included the two kinds observed in the state viz., the Large Indian Paraquet (*Psittacula eupatria nipalensis*) and the Indian Loriquet (*Coryllis vernalis*).

STRIGES.—This order includes the owls, of which four genera are common; the Indian Mottled Wood-Owl, (*Strix occellata*), the Great Indian Horned-Owl (*Bubo bubo benghalensis*), a very large type of owl called also the Eagle-Owl and smaller owls such as the South Indian Scops Owl (*Otus scops rufipennis*), and the Southern Spotted Owlet (*Carine noctua fryi*).

ACCIPITRES.—The local birds of prey fall under two families the *Gypidae* and the *Falconidae*. The Osprey belonging to the third family *Pandionidae* seems to be very rare. To the *Gypidae* belongs the Black or Pondicherry Vulture (*Torgos calvus*); and to the *Falconidae* belong the other Kites, Harriers, Hawks, Eagles and Falcons. Of these the most familiar local species are the Brahminy Kite (*Haliastur indus indus*) and the Common Pariah Kite (*Milvus migrans govinda*), two very common birds to be seen daily; the Indian crested Serpent-Eagle (*Splinornis cheela cheela*) and the winter-visiting Harriers, of which four are common, Montagu's Harrier (*Circus pygargus*), the Pied-Harrier (*C. melanoleucus*), the Marsh-Harrier (*C. aeruginosus aeruginosus*) and the Pale Harrier (*C. macrourus*), and two other genera the Shikra (*Astur badius badius*), and the Hobby (*Falco subbuteo subbuteo*) another winter straggler to South India.

COLUMBAE.—This order comprises the Doves and Pigeons which fall into the family *Columbidae*. The local and common representatives are the Blue Rock-Pigeon (*Columba livia*

intermedia) breeding on rocks or buildings, a very common bird, the Spotted Dove (*Streptopelia chinensis suretensis*), and the Indian Ring-Dove (*Streptopelia decaocto decaocto*).

PTEROCELTES.—Sand-grouse are seldom or never seen here.

GALLINAE.—These include birds such as Fowls, Pheasant, and Partridge. The Fowl and the Partridge are game birds. The commonest species in the jungles and forests of the state is the Grey Jungle-Fowl (*Gallus sonneratii*). Another fowl which is also found in some parts of the State is the Common Pea-Fowl (*Pavo cristatus*); the beautiful plumage and green neck of the Cock are well-known. The common domestic fowl is said to be derived from *Gallus ferrugineus* and *G. bankiva*. The common partridge, the Southern Grey Partridge (*Francolinus pondicerianus pondicerianus*) is also abundant.

GRALLAE.—The Rails, Finfeet, Cranes, Bustards and Water-Hens, come under this order. In the sub-order *Fulcariae* is placed the family *Rallidae* in which the local White-breasted Water-Hen (*Amaurornis phoenicura phoenicura*), and the Chinese White-breasted Water-Hen (*A. p. chinensis*) are included. The Indian Moor-hen (*Gallinula chloropus parvifrons*) and the Common Coot (*Fulica atra atra*) are also to be found.

LIMICOLAE.—One family of this order including Plovers, Snipe, Stints and Sand-pipers—the *Charadriidae*—has a large number of local representatives among which may be mentioned the Indian Red-wattled Lap-wing (*Lobivanellus indicus indicus*), the Eastern Golden Plover (*Pluvialis dominicus fulvus*), Jerdon's Little Ringed-Plover (*Charadrius dubius jerdoni*), the Sand-pipers comprising the Green Sand-piper (*Tringa ochropus*) the Marsh Sand-piper (*T. stagnatilis*) and the Greenshank (*Tringa nebularia*). Temminck's Stint (*Eriolia temminckii*), the Pintail Snipe (*Gallinago sternura*) and the Fan-tail Snipe (*Gallinago gallinago gallinago*) are also to be found. The Golden Plover, and the Snipe are good game-birds.

GAVIAE.—This order embraces the Gulls and Terns, of which the former are absent here. Both groups belong to the family *Laridae.* The two local Terns, are the Indian Whiskered-Tern (*Chlidonias leucopareia indica*) and the Black-bellied Tern (*Sterna melanogaster*). These are the common inland Terns inhabiting lakes and marshes.

STEGANOPODES.—The Pelicans, Cormorants and their kin fall under this order, and of the five families two are represented; the *Pelicanidae* are represented by the Spotted-billed Pelican (*Pelicanus philippensis*) and the *Phalcrocoracidae* by the Little Cormorant (*Phalacrocorax javanicus*) and the Indian Darter or Snake-bird (*Anhinga melanogaster*).

HERODIONES.—The Herons and Cattle Egrets belong to our area. Birds of the first sub-order *Palataleae* including the Ibises and Spoonbills, are rare here. The sub-order *Ciconiae* includes the Stork and the Common White Stork (*Ciconia alba*) and the Open-bill (*Anastomus oscitans*) which are common types. Of the sub-order *Ardeae* the Common Grey Heron (*Ardea cinerea cinerea*), the Cattle Egret (*Bubulcus ibis coromandus*), the Little Egret (*Egretta Garzetta Garzetta*), and the Indian Little Green Heron (*Butordes striatus javanicus*), belonging to the family *Ardeidae,* are to be found.

ANSERES.—This order includes the Ducks, Geese and their kin. Of the family *Anatidae* the Swans are absent, but among the Teals, the Cotton Teal (*Nettopus coromandelianus*), the Lesser and Common Whistling-Teals (*Nettion crecca crecca*), and (*Dendrocygna Javanica*) and the Blue-Wing Teal (*Querquedula querquedula*) also called Garganey are to be found. Among the ducks, the Indian Spot-bill Duck (*Anas poecilorhynca poecilorhynca*) called also the Grey Duck, is the most common. The tufted Pochard (*Nyroca fuligula*) is also to be met with. Among the migratory ducks are found the Pin-tail (*Dafila acuta*) and the Shoveller (*Spatula clypeata*). The local domestic geese are a mixed race, and are said to be hybrids between *Anser ferreus* and the Chinese *A. cygnoides.*

PYGOPODES.—The Indian Little Grebe (*Podiceps ruficollis albipennis*) is found within the State and belongs to this order.

Reptilia.—Of the four orders of Reptiles (excluding the *Rhyncocephalia*) of this group of cold-blooded vertebrates, the *Crocodilia*, including the Crocodiles, Gaviales, and Alligators, are absent, there being no large rivers in the State. The *Chelonia*, *Lacertilia* and *Ophidia* are however well represented.

CHELONIA.—This includes the Turtles and Tortoises. The Land-Tortoise (*Testudo elegans*), having a prettily marked shell with radiating yellow streaks on a black back-ground is quite common. Another genus, which is small and globose in shape and more or less of an uniform brown colour, is the terrapin (*Emyda vittata*) which inhabits the fresh-water tanks, ponds and sometimes wells, and is edible; its presence is supposed to purify the water. The most common of the fresh-water Tortoises (*Nicoria trijuga*), has a brown shell with a yellow stripe on each side of the plastron.

LACERTILIA.—This order comprises the Lizards. Of these the most remarkable is the Monitor (*Varanus bengalensis*) a large lizard, terrestrial and inhabiting holes in dry places. It sometimes attains a length of four feet and is abundant in the State. Its skin is used for making drums. Another familiar member of this order is the House-Lizard, or House-gecko (*Hemidactylus gleadovii*) which has suctorial and adhesive digits, by means of which it climbs up even smooth walls, and a warty skin. Many other species of *Hemidactylus* and related genera are common; among the more notable are the Tree-Lizard (*H. giganteus*) and other House-geckoes. Another very common lizard is the Garden-Lizard or "Blood-Sucker" (*Calotes versicolor*). Its body is covered with scales, with a row of median backward pointing spinous scales along the back and crest, a long tapering tail and clawed digits. Males of this lizard assume bright colours during the breeding season, red, black, and yellow predominating. Probably it is the blood-red colour of the neck and throat that suggests the popular name.

The interesting genus Chamæleon (*Chamaeleon calcaratus*) is also very common. This animal is famous for its ability to change its colour. Though some of the *Calotes* also have this faculty the *Chamaeleon* stands distinct from *Calotes* and other reptiles in many respects, viz., the slow and deliberate movements of the limbs, mobility and independent action of the eyes, the projectility of the tongue, and the prehensile use of the tail. A very common lizard to be met with in our gardens and elsewhere is *Mabuia carinata* with obtuse flat snout, and an olive-brown skin with light lateral bands on the upper side, reaching a length of about 12 or 14 inches. Another smaller animal resembling *Mabuia* but having a red tail when young is *Lygosoma punctatum*, sometimes reaching 4 or 5 inches in length. This is supposed to be poisonous. The other ground lizard is *Cabrita leschenaultii* with tail nearly twice as long as the body, brownish or golden skin and tail and often reddish hind limbs.

Ophidia.—Snakes compose this order, and they form more than half the number of genera of Reptiles. Many genera of snakes are known in the State, both poisonous and non-poisonous. Among the *Typhlopidae* the blind snake, occasionally to be met with in decaying wood, is *Typhlops braminus*, about 7 inches long and 1/5 to 1/8 of an inch in diameter. The *Boidae* include the Pythons, and similar large non-poisonous snakes. Not very large specimens of the Rock snake, called in the vernacular Veṇṇándei (வெண்ணாந்தை), usually about 3 or 4 feet in length but occasionally longer, are to be met with in the State. Another snake *Gongylophis conicus*, called in the vernacular Podeiyan (பொடையன்), is said to be found by the snake-charmers. This is a viviparous snake, and has a skin marked like that of a leper, and is therefore supposed to give leprosy by licking. It is commonly called the Red Sand-Snake. Another non-poisonous snake of this order and common here is the Black Sand-Snake (*Eryx johnii*) called in the vernacular Irutalai viriyan (இருதலை விரியன்). It has a very blunt tail rounded at the end. A reddish-brown band darker than the rest of the body covers the tip.

It is the blunt tail that is responsible for the popular belief that it has two heads which change places every six months.

The *Uropeltidae* or rough-tailed earth-snakes are peculiar to South India and Ceylon. It is not known whether any genera of these snakes are to be found here.

The *Colubridae* include by far the largest number of snakes, poisonous and non-poisonous. The commoner ones are as follows: the common Wolf-Snake (*Lycodon aulicus*) which often mimics the Krait, a flat-nosed brown snake called in the vernacular Kaṭṭu viriyan (கட்டு விரியன்) when banded and Vazhalai (வழலை) when not. This is not poisonous as it is believed to be. Another non-poisonous species allied to this is *Simotes arnensis*, a pale-brown orange-coloured snake with well-defined black bands also called in Tamil Kaṭṭu viriyan. Another snake called the variegated Kúḷai Snake (Kúḷai pámbu) is also common (*Oligodon subgriseus*). The common Indian Rat-Snake ((*Zamenis mucosus*) called Śárai in Tamil, is one of the largest snakes often measuring 6 or 7 feet. This is non-poisonous; it is erroneously believed to mate with the Cobra as the male and to be venomous. Another snake which is erroneously supposed to be poisonous is called in Tamil Komberi mukkan (*Dendraphis pictus*). This common snake is arboreal, as the vernacular name (Kombu= branch) signifies. The species of *Tropidionotus* are many and common and are non-venomous. The common Pond-Snake or Checkered Keel-back, also called the Water Snake, is a fresh-water snake very common in the tanks and pools. This is called in the vernacular Nirkorattai, or Thannippambu (*T. piscator*). A very common snake is the Chamæleon Snake (*T. stolatus*) called in Tamil Olei pambu which is found in gardens and houses. This snake is of a greenish or brownish olive colour with black spots or reticulated cross-bars, intersected by two yellow longitudinal bands which are most marked posteriorly. The Green Ground-Snake is a more common water-snake, and is also called Thannirpambu (*T. plumbicolor*). This is of a dull-green colour, uniform or with traces of black markings above, and is

about 2½ feet in length and 3½ inches thick. Another aquatic snake is the Water-Snake (*Helicops schistosus*) of an olive-brown colour, uniform or with dark lateral streaks. The so-called arboreal, but generally terrestrial, Brown Tree-Snake (*Dipsas trigonata*) has a close resemblance in shape and colour to *Echis carinata*, for which it is often mistaken. The Green Tree-Snake (*Dryophis mycterizans*) called in Tamil Pacchai pambu, with a long pointed snout, and a green body like a whip-cord, and supposed to be poisonous and given to darting at the eyes of passers-by, is mainly arboreal as its protective green colour would suggest. It is also found amongst green grass and bushes. The venomous snakes belong to the genera *Bungarus, Naia* and *Vipera*. The Banded Krait (*Bungarus fasciatus*) (4 to 6 feet in length) is a very dangerous terrestrial snake with a brown snout, of a bright-yellow colour with black rings as broad as the interspaces between them or broader, and a black band beginning between the eyes and widening behind on the head and the nape. The common Krait (*B. caeruleus*) is also common; it is about 3 feet in length. It is of a dark brown or bluish colour above with narrow transverse white streaks, and is very poisonous. These are called in the vernacular Kandankaru Vazhalai and Karuvazhalai. Another very poisonous snake is the Binocellate Cobra (*Naia tripudians*) called in Tamil Nágam or Nalla pámbu, sometimes reaching about 6 feet in length. Many supposed varieties or "castes" of this venomous snake are distinguished locally, viz., brahmin, raja, pariah, etc. The more venomous and larger species (*N. bungarus*) reaching a length of more than 10 feet is fortunately not so common. It feeds on other snakes. Both these cobras can be recognised by their hoods. The Russel's Viper or Chain Viper (*Vipera russellii*) is one of the most deadly snakes. It is of sluggish habits, and frequently does not move out of the way on the approach of man. It is of a pale-brown colour above, with three longitudinal series of black light-edged rings, sometimes replaced by faint dark spots. This snake is not uncommon. It is called in the vernacular Viriyan or

Kannádi viriyan. Another and commoner poisonous snake is the Carpet-Viper or Little Indian Viper (*Echis carinata*) called Údu suruttai in Tamil. This makes a prolonged almost hissing sound by rubbing the folds of the sides of the body against one another. This snake has a cruciform or (|) shaped whitish dark-edged marking on its head.

Amphibia.—(Batrachia). This phylum consists chiefly of the Frogs and Toads. A large number of frogs belong to the *Ranidae.* The common Green Frog prevalent everywhere is *Rana hexadactyla.* A much larger frog which is occasionally to be found is *R. tigrina.* This is commonly called the Bull-frog. Other species of Rana are also to be found, especially *R. breviceps* and *R. limnocharis.* The Chunam-frog (*Rhacophorus maculatus*) which is of a brown colour and about 2 or 3 inches in length, is found on the walls of out-houses and gardens, and occasionally or trees or rocks. It can adhere to walls by the adhesive webs and digits of its toes. The small frogs which appear in great numbers after rain, with a smooth reddish-greyish olive skin and a large marking on the back are *Microhyla ornata* (*Diplopelma ornata*).

The toads are represented by the common genus *Bufo,* the chief and common species being *B. melanostictus.*

Pisces.—(Fishes). The Pisces found in the State are none of them very large; they are mainly fresh-water fishes of the tanks, pools and streams. Many of fishes are caught and eaten. The principal edible varieties are called *Kandai*, *Koravai* and the *Virál*, in the vernacular. Most of these fresh-water fishes have yet to be identified. One very common fish is *Ophiocephalus punctatus.* The common fresh-water fishes of the plains of South India are the *Siluroids*, and the *Cyprinoids.* Most of the genera belonging to these groups may be found here.

Pisces form the last phylum of the vertebrate fauna. Here follow some of the chief groups of the Invertebrate fauna, but the groups are not arranged in the regular order.

Arachnida.—This class includes the Spiders and Scorpions. Many varieties of spiders are to be found. The large and formidable looking spiders, some of which belong to the genus *Mygale*, prey on insects of various kinds. Numerous spiders which live out of doors and make their webs, sometimes very strong snares, belong to the group *Epeiridae.*

The Wolf Spiders (*Lycosidae*) which attain a considerable size and carry their ova about with them in a small bag attached to the abdomen, and the Crab-spiders which frequent flowers and often exhibit protective colours and feign death when alarmed, are also very common. The House-spider which makes its web inside houses is a species of *Tegenaria.* A genus, probably *Agelena*, makes its webs in grass, and in corners of walls, with a funnel-like tube which forms its den in the centre. The beautiful scarlet silky-or velvety-coated insect, often wrongly supposed to be a cochineal-insect, is a small spider (*Trombidium*) and is very common on grass after rain.

The scorpions, which are poisonous arachnids, carrying their poison sac at the tips of their 'tails,' are very common everywhere. The little red scorpion, which frequents houses is a species of *Scorpio.* The very large black scorpion which is also common here is *Buthus afer.* It sometimes attains a length of 6 inches and its sting may even prove fatal.

Myriopoda.—The millipedes and centipedes belong to this class. The millipedes belong to the *Chilognatha* and are harmless. The common large, hard-crusted, glistening black or brown creatures of this class, which coil themselves up when touched, belong to the genus *Julus* of this section. The smaller millipedes also common, with yellow or red markings on head and body, which live under flower-pots or stones, and crawl about in gardens and backyards, belong to the *Geophilides.*

The formidable *Scolopendridæ* or Centipedes, the bite of which is very venomous, are common. One species of *Scolopendra* attains a length of 9 or 10 inches, and smaller ones frequent dwellings.

Mollusca.—The mollusca include the slugs, snails and mussels. The mollusca of the state have not yet been collected and identified. The snails include land, fresh-water and amphibian forms. The commonest genus is *Helix*. The Bivalves are also very common in fresh water, especially the fresh-water mussels (*Unio sp.*)

Annelida.—This class includes the earth-worms. The most common genus is *Megascolex.*

Crustacea.—(Class *Decapoda*). This includes the crabs, etc. Crabs are usually to be found inhabiting holes near water.

Insecta.—(*Insects*). The distribution and variety of the Insect fauna closely follow the floristic features of any region. No other group of animals enters into such intimate and complex relations with plants as insects do.

About nine orders are included under this group each being fairly represented.

ORTHOPTERA.—This includes the tiny grasshoppers, the locusts and mantids and that common house-hold pest the cockroach. The family *Acrididæ* includes the painted grasshopper (*Poecilocerus pictus*) which is only found on the Calotropis gigantea (madar) and produces two broods in the year. The big grasshopper (*Hieroglyphus banian*) is found everywhere on such crops as Paddy, Sugarcane and Maize, feeding on the foliage and cutting the earheads. The common Grasshopper (*Tryxalis turrita*) is found throughout the state, and is scarcely a pest although it often occurs in large numbers. The small brown and green grasshoppers commonly met with are other species of *Tryxalis* and *Crotogonus*. The family *Grillidæ* includes the Mole-Cricket (*Gryllotalpa Africana*) found in damp corners, predaceous on smaller animals and doing damage by burrowing tunnels into the ground in search of food. The *Blattidae* comprise insects such as the cockroaches (*Periplanata Australasiae*) and (*P. Americana*), found in towns, which have been introduced into India by shipping. They are well-known house-hold pests, though they do little damage in the field.

Another genus of cockroaches, the *Stylopyga* has been introduced. The praying-mantis, a strange looking insect so called on account of the peculiar attitude that it assumes, with its front legs raised and folded, is commonly met with among the green foliage which it resembles. This is included in the family *Mantidae* which are noted for their aggressive coloration. Another mantid is the common Stick-insect, which resembles the straw or a twig on which it usually rests. The Leaf-insect belonging to the family *Phasmidae* is also found in large numbers.

DERMOPTERA.—The Earwigs form this group of insects. The ordinary Earwig (*Nala Lividipes*) is rarely a pest; on the contrary it is often beneficial, since it is largely carnivorous and has been recorded as an important predator on the larvae of fruit-flies and house-flies.

NEUROPTERA.—This class includes the common dragon-flies and ant-lions the former being diurnal while the latter are nocturnal. The Ant-lions are characterised by their beautifully dotted wings and by their clubshaped antennae. They are beneficial in that they feed on ants as their name signifies. The dragon flies feed on smaller insects. Both groups are very common and represented by a number of genera.

THYSANOPTERA.—This class comprises the "Silverfishes" which damage books, papers, etc., and the Thrips which damage crops. The ordinary "silverfish" met with is *Lepisma sp.* The Chillies-thrips and Onion-thrips (*Scirto-thrips dorsalis*) (*Heliothrips indicus*) suck the juice from leaves and shoots and make the tender leaves curl and fade. The latter are found often in company with plant-lice.

ANOPLURA.—This class includes the human head-louse and the cattle-louse. The *Pediculidae* include *Pediculus capitis* and *P. humanus*, the former being the common head-louse. The cattle louse (*Haematopimus tuberculatus*) lives on th[redacted] buffaloes feeding on their blood.

RHYNCOTA.—These comprise all bugs from the tiniest plant-lice and bed-bugs to the biggest water ones; most of them are found here. The *Pentatomidae* are easily recognised by the presence of the triangular scutellum and their peculiar odour. The common members of the family are:—*Coptosoma cribraria,* found on all Leguminous plants and on Compositœ; *Dolichoris indicus,* the green-bug found on Cereals and Sunflower; *Bagrada picta,* the painted-bug found on cruciferous plants; and *Nezera viridula* the green-bug found on Cereals. The other bugs of this group found here are *Aspongopus janus, Cyclopelta siccifolia,* and *Phezodorus rubrofasciatus.* The *Corridae* include the bugs found on Pulses and Cereals. *Clavigralla gibbosa* and *C. horrens* are found on Red gram. The Paddy bug is *Leptocorisa varicornis.* The *Lygaeidae* embrace the tiny bugs found on Calotropis, Cholam, Cotton, Red gram, and Chillies. *Lygaeus panduras* is the bug found on the above plants. *Oxycarenus lactus* is found on Cotton, Bendai (Lady's-finger) and Gogu (Hibiscus cannabinus). *Aphanus sordidus* is found feeding on harvested seeds of Gingelly, Ground-nut and Cumbu. *Pyrrhochoridae* include the Red Cotton Bug (*Dysdercus cingulatus*) feeding on malvaceous plants. *Tingididae*:—*Urentius echinus* is found on and damages Brinjals (Solanum melongena).

Reduvidae.—The bug *Conorhinus rubrofasciatus,* the nymphs of which are found in dusty corners of houses and are predaceous on small house hold insects, is very important in that it is the carrier of the disease "Kala-azar".

Clinocoridae.—*Clinocoris hemipterus* feeds on the blood of man, birds and bats.

Capsidae.—*Disphinctus politus* the betel-vine bug, and *Calocoris angustatus* the Cholam-ear-head Bug are included in this group.

Fulgoridae.—*Eurybractys tomentosa* found on Malvaceous plants, and *Pyrilla perpusilla* found on Sugarcane belong to this family.

Jassidae.—This class includes the Mango-hopper (*Idiocerus niveosparus*) which does serious damage to the mango flowers by sucking their juice so that they fall. Bugs belonging to the families *Psyllidae, Aphididae* (including the plant-lice) *Aleurodidae* (the coloured bugs) and *Coccidae* (to which class belong the scale insects and lac) are found in no small numbers in the state. The *cochineal* insect (*Dactylopius tomentosus*) has been introduced and has destroyed quantities of Prickly-pear (Opuntia dillenii).

LEPIDOPTERA.—This class includes the Butterflies and Moths. The moths comprise the following families:—

Artiadae.—The white-winged moth ***Estigmene lactinea,*** is common. Its caterpillar is the hairy black caterpillar which feeds on Cumbu, Ragi and various low-growing plants. ***Amsacta albistriga*** is also a white-winged moth, with black dots and a red abdomen, the caterpillars of which, known as the red-hairy caterpillars, feed on Cumbu, Ground-nut and pulses and are considered as a serious pest on Ground-nut. ***Pericallia Ricini*** is the common Castor-Moth, and ***Utethesia pulchella*** the Sunn-hemp-pod borer, found on Sunn-hemp and Heliotropium; it has white black-dotted wings is easily attracted to light and is common. *Noctuidae:* include the Loopers. ***Chloridea obsoleta*** is the Pulse-Moth, ***Polytella gloriosae*** is the Lily-moth and ***Prodenia litura*** the polyphagous moth feeding on Tomato, Castor, etc. ***Ublemma olivacea*** the pest of Brinjal, and ***Achaea melicerta,*** the Castor semi-looper found on Castor, Pomegranate and Euphorbia, occur in large numbers.

Lymantriadae.—Orgyia postia is the polyphagous pest found on Castor and Erythrina. ***Euproctis fraterna*** and ***E. scintillans*** found on Hibiscus, Red-gram, etc., also occur here.

Sphingidae.—These include the Sphinx, the caterpillars of which are easily recognised by their size and by the short appendage at the tail end. The moths are fairly large, with large coloured wings and antennae and a long coiled proboscis.

Herse convolvuli is the Sweet-potato Sphinx. *Acherontia Styx* (Death's head Moth) is one of the large moths with a skull-mark on the prothorax. *Deilephila nerii*, the Oleander Hawk-Moth, has a very large caterpillar. It has green wings with white lines.

Limacodidae.—This class includes the castor-slug *Parasa lepida* which is polyphagous. The larval spines are poisonous. The moth is small with anterior wings coloured green. The large and beautifully coloured Atlas-Moths (*Attacus atlas*) are found in large numbers in the forests of the State. They belong to the family *Saturnidae.*

Butterflies : *Papilionidae* : *Papilio demoleus* and *P. Aristolochiae* are the common Lemon and Aristolochia butterflies.

Pieridae.–Catapsilia Pyranthe, the Lemon-Coloured Daincha Butterfly, belongs to this group.

Lycaenidae.—Virachola Isocrates, the Pomegranate butterfly, is a member of this family.

Hesperiadae.—The Cocoanut-Skipper *Gangara Thyrsis*, *Parnara Mathias*, the Paddy-Skipper, and *Udspus folus*, the Turmeric-Skipper are found here.

The butterflies *Danaeis chryssipus* aud *Hypolimnus missipus* are very common and also interesting. The male of the former mimics the female of the latter.

DIPTERA.—The common Cattle-fly *Hippobosca maculata* found on cattle, *Oestrus ovis* on sheep, the Toddy-fly (*Pycnosoma flaviceps*) the House-fly (*Musca nebulo*), the Gall-fly, the Fruit-fly (*Dacucus cucurbitae*), the Culid mosquito (*Culex sp.*), the Rat-and Dog-flea all belong to this family and are found here.

HYMENOPTERA.—This class includes the stinging ants (*Myrmicites*) one of which *Atta minuta* is common. The other species belonging to the genera *Ocodoma*, *Eciton*, and *Myrmica* are all very common. Of the *Formicides* or true ants there are about twenty species belonging to the genus *Formica*, of which the red is *F. rufra,* while the formicid ant (*Solenosolenopsis*

germinata) is the big black ant of our houses. *Apis indica,* the common Honey-Bee and other *Apis spp* belong to this group and also the Mason-Wasp and the Carpenter-Bee. The Mason-Wasp (*Pelopeaeus coromandelicus*) at the beginning of summer becomes busy in houses, building up cells of clay, in which it places its eggs and caterpillars paralysed by its sting, as food for the young wasps. The Carpenter-Bee (*Xylocopa sp.*) is very destructive to timber, into which it bores a tunnel in which it deposits its eggs. Other species of wasps are also common.

COLEOPTERA.—The most characteristic beetles found in the State range from the common dung-rolling scarabid beetles to the large cerambycid stag-beetles. The family *Scarabaeidae* includes the common Dung-roller (*Heliocopris bucephalus*) The *Dynastidae* include the Cocoanut Rhinoceros-beetle (*Oryctes rhinoceros*), a large beetle which damages the cocoanut-palm. The *Rutelidae* include the common beetle *Anomala varians* which attacks bushes and is found throughout the year. The *Cicindelidae* or Tiger-beetles, the *Carabidae,* or Ground-beetles, and the *Buprestidae* or Jewel-beetles are very common. The *Coccinellidae* include the Ladybird beetles, which are very tiny with black markings, feed on aphids, and are therefore beneficial. The common Ladybird is *Coccinella septempunctata.* The *Dermestidae* have one important genus *Epilachna,* species of which are found on crops such as Brinjal. The most splendid beetles are the *Buprestidae* with their golden and green or red wings, which are sometimes used for ornamenting dresses and embroidery. The *Elateridae* and *Meloidae* (Cantharid beetles) are also represented by some fine species.

CHAPTER III.

THE PEOPLE.

SECTION I.—STATISTICAL.

Census Statistics.—The area of the State is 1,179 square miles or 24 per cent of that of an average Madras District. It contains 435 towns and villages. The capital and eight other places are regarded as Towns: Ponnamaravati, Varpet, Ramachandrapuram and Arimalam; each have a population of over 5,000. Tirumayam, Alangudi and Kiranur are headquarters of taluks, and Pillamangalam—Alagapuri with the contiguous British Sevvalpatti forms a single urban unit. The number of occupied houses in the State according to the census of 1931 was 81,565 including 5,428 in the capital town. The population of the State was 400,694 in 1931, and that of the capital 28,776. The population of the State according to the last three censuses was as follows :—

1911	...	411,886
1921	...	426,813
1931	...	400,694

The total population showed a decrease of 26,119 or 6·1 per cent in the last census. The census officer attributed this decrease to "migration, brought about by agricultural conditions." He wrote, "The first year (fasli 1331) began with untimely rains and rising prices; the yield of dry crops was fair, but wet crops failed over large areas. Fasli 1332 was good, and fasli 1333 was fair. But the next five years (1334-1338) were perhaps the worst the State has seen, since the great famine of 1887. The rainfall was scanty, untimely and unevenly distributed, and both dry and wet crops suffered impartially. Prices were not very high, but the people had not the means to buy grain even at the price at which it was offered.

To add to the cup of misery, cholera raged in the State throughout this period, with a recorded death-roll of 4,000 people during the five years. The ryot therefore had recourse to his time-honoured remedy of emigration; but this time it was on a scale, not dreamt of in the days of yore. In the five years 1925 to 1929, 53,000 people left the State, 34,500 (65 per cent.) for the first time. The tide of emigration ebbed in the two succeeding years, which were more or less favourable for cultivation, but there can be no doubt that a good number of people who emigrated between the years 1925 and 1929 were still on the estates, when the census of 1931 was taken."

Year.		Number of labourers.
1925	...	8,597
1926	...	5,918
1927	...	14,955
1928	...	17,503
1929	...	6,046
1930	...	4,261

This conclusion of the census officer is borne out by the figures entered in the margin kindly furnished by the Ceylon Labour Commissioner at Trichinopoly, of the number of labourers drawn from Pudukkottai State.

There were 69 houses per square mile in the Pudukkottai State in 1931 against 130 in the Tanjore District, 91 in the Trichinopoly District, 82 in the Madura District and 78 in the Ramnad District.

Density of Population.—The density of population per square mile is 340 for the State as a whole, but it varies from 498 per square mile in Ponnamaravati firka to 213 in Nirpalani firka. It is no wonder that such districts as Malabar with its high rainfall and the Godavari, Kistna, and Cauvery deltas should have a very high density; but there are a few districts, arid by nature, which have a density slightly higher than Pudukkottai, namely Ramnad (382), Guntur (354), Salem (345), and Coimbatore (345). In the State, next after Ponnamaravati firka come Tirumayam (444), and Karambakkudi (434). The firkas of Kudumiamalai, Viralimalai, and Pudukkottai (excluding the municipal area) have a density ranging from 250 to 300, and Kiranur, Kunnandarkoil, Varappur and Nirpalani come last with a density of 200 to 300. Taking

the figures for the Taluks as a whole, Tirumayam stands first with 407 per square mile, Alangudi next with 393, and Kolattur last with 247. The high density in Tirumayam taluk is due to the large demand for labour in the Chettinad, while the small density in the Kolattur taluk is due to the poor soil, absence of industry and indifferent cultivation. The density of population in Pudukkottai town is 5,755 per square mile.

The population of the State is mostly rural and Mr. Pennington's observation on the census results of 1871 may be recalled, namely, that "there is a greater proportion of small villages or a smaller proportion of towns in Pudukkottai than in any district in the Madras Presidency with the exception of Vizagapatam and Chingleput................It would appear however that the villages are closer together than in many parts of the Madras Presidency; for there are 56·2 houses to a square mile against 45 in the Madras Presidency."

In 1931, there were 435 villages including nine places treated as towns, among which the population was distributed as follows:-

2 towns with over 10,000 inhabitants;
3 towns with a population of between 5,000 and 10,000;
123 villages and towns with a population of between 1,000 and 5,000;
132 villages, with a population of between 500 and 1,000;
159 villages, with a population of between 50 and 500;
and 16 villages, with a population of below 50.

Two-fifths of the villages in the State contain less than 500 persons, while nearly two-thirds of the population are living in villages with over 1,000 people.

The percentage of the urban population in the State has risen from 6·1 in 1921 to 17·3 in 1931. Six of the nine so called towns are situated in the Chettinad and contain 88 per cent of the urban population outside Pudukkottai town. The rise in their population is due to the acute agricultural distress of 1925–29 which resulted in a large number of people settling in the Chettinad where they were able to get work.

Migration.—It appears from the census report of 1931, that during the preceding decade 922 persons per 10,000 of the total population had immigrated into the State;—805 from the contiguous districts, 85 from other Madras districts and States and 32 from beyond the limits of the Madras Province.

One striking feature about these statistics is the comparatively small proportion of the people born in the State who were found in it on the census night. The following figures will illustrate the point:—

	Number of persons per 10,000 of the population born within the area.
Madras Presidency	9,939
Tanjore	9,657
Trichinopoly...	9,376
Madura	9,625
Ramnad	9,675
Pudukkottai	9,078

"This apparent anomaly," as the Census Superintendent points out, "is not real." Under normal conditions, the proportion of foreign born in any region increases as the area of the region diminishes..................As the area of investigation grows smaller, internal movements between smaller areas merged in a larger unit figure as separate migrations, and swell the figures of foreigners. Pudukkottai State is a small strip of independent territory with an area less than 7 per cent and population less than 5 per cent of the combined area and population respectively of the four adjoining British districts—Tanjore, Trichinopoly, Madura and Ramnad. The British neighbours are the kith and kin of the State subjects and are living more or less under similar economic conditions. The (general) loss in population during the last decade has affected alike both classes of people enumerated in the State, the Pudukkottai born losing 6·6 per cent and those born in the four adjoining British districts 5·7 per cent.

"Statistics by taluks show that a large percentage of the British-born people in the Pudukkottai State were enumerated in the State taluk adjoining each British district."

Taluk.	District of birth			
	Trichinopoly.	Tanjore.	Madura.	Ramnad.
Alangudi	1,896	**8,130**	567	776
Tirumayam	2,284	2,909	1,868	**5,769**
Kolattur	**5,867**	1,555	432	244
Total ...	10,047	12,594	2,867	6,789

Figures of persons found in Pudukkottai State but born in the other Madras districts and States and in areas outside Madras Presidency are as follows:—

Tinnevelly	1,082	Madras Presidency 3,377.
Malabar, Travancore and Cochin ...	828	
Salem and Coimbatore	813	
Madras, Chingleput, Chittoor, North Arcot and South Arcot	589	
Other districts and States	65.	
Ceylon	905	Outside Madras Presidency 1,272.
Strait Settlements, Federated Malay States and Burma	186	
Mysore State	88	
French and Portuguese Possessions ...	47	
Other Provinces and States in India ...	34	
Africa	8	
Europe	4	

The figures denoting the number of emigrants to other places within the Madras Presidency as enumerated in 1931, are as follows:—

Tanjore	1,900	Adjoining Madras districts Total 6,787.
Trichinopoly	2,594	
Ramnad	2,062	
Madura	231	
Other Madras districts and States ...	773.	

The decrease in the population as disclosed by the census figures of 1931 gives no cause for any alarm. The numbers enumerated at a particular census depend upon the nature of the seasons just preceding it. The failure of crops for a number of years in the decade 1921 to 1930 stimulated emigration to Ceylon, Burma and the Federated Malay States. More than 75,000 persons left the State for Ceylon alone during this decade; and it is safe to assume that at least one half of this number were still in that colony in 1931. If this number had been added to our recorded population in 1931, the total would have exceeded that recorded in 1921.

Sex.—There were 191,134 males in 1931, against 205,033 males in 1921 and 209,560 females against 221,780 in the previous census. The number of females to 1,000 males was thus 1,082 in 1921, and 1,096 in 1931.

When the first census was taken in the State in the Tamil year *Vijaya* (1826-27), the population consisted of 107,909 males and 103,833 females. There were then only 962 women for every 1,000 men. The census of 1871 showed for the first time an excess of women over men; and this excess has continued since. It is reported that the proportion of women to men rose everywhere after the famine of 1877 since famine mortality falls more heavily on men than on women, "the latter sex apparently being constitutionally more able to resist the hardships which economic stringency brings." According to the late Mr. J. T. Marten, Census Commissioner in India for 1921, "the statistics of birth indicate that in the regions in which the Mongolian and Dravidian race element is strongest, (these include Southern India), there is a higher proportion of females born than in those areas in which the Aryan or Semitic strain prevails...................Such indications as these enquiries afforded were in favour of a large female element in families belonging to the lower strata of the population." However, the Census Superintendent of the State observes, "the available material for the State appertaining to these matters is neither

wide in range nor large in volume to justify an attempt at an independent local investigation of the problem."

Civil condition.—Of the total population in 1931, 187,892 were unmarried, 104,579 married and 48,345, of whom 8,371 were males, and 39,974 were females, were widowed. No one was enumerated as either married or widowed between the ages of 0 and 5. Between 5 and 10, there were only 38 married and none widowed; between 10 and 15, 989 married and only 14 widowed; and between 15 and 20, 8,740 married and 939 widowed. The figures are a significant indication that persons marry at a much later age in the State than in the surrounding districts. The number of child-widows and widowers in the State is almost negligible when compared with either the Madras Presidency or India as a whole. In the State men marry earliest among the Christians, Hindus come next, but Mussalmans marry comparatively later. The percentage of unmarried women at the age of 24 was greater among Hindus (21·2) than among Christians (16·6) and Mussalmans (13·7).

Languages.—The following table shows the different languages spoken in Pudukkottai in 1931, and the number of persons speaking each :—

Total population	400,694.	
Tamil	387,740	The vernacular of the State.
Guzarati	1	Other Indian vernaculars 21,904.
Hindi	187	
Hindustani	1,993	
Kanarese	5,118	
Konkani	1	
Malayalam	522	
Marathi	660	
Saurashtri	1,172	
Telugu	12,250	
Arabic	23	Vernaculars of non-Indian Asiatic countries 25.
Malay	1	
Singhalese	1	
Danish	2	European languages 25.
English	22	
Spanish	1	

Practically all Christians speak Tamil; only 42 out of 17,960 speak other languages, (25 of them European languages and 17 the Indian vernaculars). Of 15,194 Mussalmans, 13,157 speak Tamil, and 2,009 Hindustani. The other languages spoken by them are Arabic (23), Malayalam (3) and Kanarese (2).

Tamil, the State language, is the mother tongue of 94·5 per cent of the total population. Telugu is spoken by a little over 3 per cent of the people consisting of Komattis, Chettis, Nayadus, Rajus, and a few others. The Telugu spoken in the State is more or less a patois including a number of Tamil words with Telugu suffixes. The Kanarese spoken here (1·2 per cent) is mostly the peculiar dialect of the Kurumbars; it is old Kanarese with a large admixture of Tamil and Telugu words. Hindustani is spoken by 2,180 persons, of whom 2,009 are Mussalmans. Saurashtri, a dialect of Guzarati, is the language of the silk weavers settled mostly in Tiruvappur. More than 70 per cent of the Marathi-speaking people in the State live in Pudukkottai town. The number of persons whose mother tongue was Malayalam rose from 9 in 1891, to 522 in 1931. Such persons are found chiefly in Pudukkottai Town and in Chettinad. Arabic has been returned by 23 Ravuttars but it is very doubtful whether what they speak is correct Arabic.

Religion.—Out of a population of 400,694 in 1931, 367, 540 or 91·7 per cent were Hindus, 15,194 or 3·8 per cent Mussalmans, and 17,960 or 4·5 per cent Christians. The number of Mussalmans shows an increase of 1·23 per cent over the figures for 1921, while the figures for Hindus and Christians show a fall of 6·56 and 2·76 per cent respectively. The agricultural distress during the previous decade seems to have hit the Hindus most and the Christians to an appreciable extent, while Mussalmans being traders were not much affected.

Of the 17,960 Christians, 17,450 or 97 per cent were Roman Catholics, 351 were Lutherans, 136 belonged to the Anglican communion and 23 to the other denominations.

The Mussalmans are Sunnis belonging to the Hanafi School. The following quotation from the census report may be of interest:—"Within the last ten years, a Singhalese woman and a Chinese girl have been admitted into Hindu families in the State, and have been returned in the Schedule as Hindus. Christians and Mussalmans do not appear to have made any appreciable addition to their numbers by conversion during the decade."

Literacy.—In 1931, 45,238 persons (or one person in every nine) were literate, against 42,929 in 1921. Literacy was much higher among males (216) than among females (19). 3,393 males (or 178 in ten thousand) were literate also in English against 148 females (7 per ten thousand).

In spite of the general fall in population during the decade 1921 to 1931, the number of literate persons has risen under all heads.

—	1931.		1921.	
	Actual number.	Number per thousand.	Actual number.	Number per thousand.
Literate :—				
Males	41,326	216	40,126	196
Females	3,912	19	2,803	13
Literate in English :—				
Males	3,393	18	3,125	15
Females	148	0·7	105	0·5

More than half the population of Pudukkottai town is literate, and more than 26 per cent of the literate population is

literate in English as well as in a vernacular language. Female literacy is also high in the capital town where one-eighth of the women are literate.

—	Number per 10,000.			
	Males.		Females.	
	Literate.	Literate in English.	Literate.	Literate. in English.
Pudukkóttai Town ...	5,042	1,326	1,243	82
Alangudi Taluk (excluding Pudukkóttai Municipality).	1,872	59	68	1
Tirumayam Taluk ...	2,438	127	156	3
Kolattur Taluk	1,344	55	82	1
Pudukkóttai State ...	2,162	178	187	7

Next to the capital town comes Tirumayam taluk with about a fourth of the male population literate; Álaṅguḍi (excluding the capital town) shows a higher figure of male literacy than Koḷattúr, but female literacy is lower.

The numbers of literates among the Hindus, the Mussalmans, and the Christians are shown below :—

Religion.	Total.			Literate.			Literate in English.		
	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.
All religions.	400,694	191,134	209,560	45,238	41,326	3,912	3,541	3,393	148
Hindus ...	367,540	175,281	192,259	39,561	35,964	3,597	3,208	3,112	96
Mussalmans.	15,194	7,159	8,035	3,255	3,116	139	77	77	...
Christians ...	17,960	8,694	9,266	2,422	2,246	176	256	204	52

For purposes of comparison, these figures may be expressed as follows :—

—	Number per 10,000 of the population.			
	Males.		Females.	
	Literate.	Literate in English.	Literate.	Literate in English.
All Religions	2,162	178	187	7
Hindus	2,052	178	187	7
Brahmins	7,600	3,687	3,329	103
Depressed classes ...	769	4	10	...
Others	2,073	65	104	2
Mussalmans	4,353	108	173	...
Christians	2,583	235	190	56
Roman Catholics ...	2,490	108	102	10
Protestant sects ...	5,455	3,091	3,702	1,830

Mussalmans have the largest proportion of male literates, Christians come next, and Hindus last. The high percentage of literacy in English among Christian women is marked. Among Protestants about 55 per cent of males and 37 per cent of women are literate, while among Roman Catholics the percentages are only 25 and 1 respectively.

The progress of literacy since 1891 in Pudukkottai and the surrounding districts is exhibited below* :—

i. Literacy per 10,000 of population.

—	Males.					Females.				
	1931	1192	1911	1901	1891	1931	1921	1911	1901	1891
Pudukkóttai	2,820	2,555	2,260	2,125	2,059	232	155	80	55	40
Tanjore	3,347	3,203	2,911	2,738	2,644	364	290	195	112	66
Trichinopoly	2,470	2,216	1,991	1,698	1,827	320	239	149	93	71
Madura	2,691	2,320	2,257	1,769	1,870	243	175	114	77	55
Ramnad	3,093	2,812	2,810	2,305	2,481	207	173	104	59	40
Madras Presidency ...	2,107	1,986	1,833	1,601	1,646	319	262	171	120	92

* Extracted from "Census of India, 1931, Vol. XIV—Madras."

ii. Literacy in English per ten thousand of population.

—	Males.				Females.			
	1931	1921	1911	1901	1931	1921	1911	1901
Pudukkóttai	178	152	87	82	7	5	1	1
Tanjore	355	298	193	160	20	14	7	5
Trichinopoly	288	194	142	101	32	16	10	5
Madura	219	153	106	70	27	16	9	6
Ramnad	167	111	66	42	12	6	4	2
Madras Presidency	220	170	121	90	30	20	13	11

SECTION II.—ANTHROPOLOGY (CULTURAL).

The Tamils of old classified the habitable parts of the land into five natural regions (*tinai*—திணை)—the hilly country, the woodland, the sea shore and the plough-land. The people of the hilly country (*kurinji tinai*) were hunters. The *Valaiyans* (from the Tamil word *valai*, a net used to catch game) and the *Kuravars* are the modern representatives of the hillmen of old. The people of the *Mullai* tract (woodlands) led a pastoral life; and to this tribe belong the *Idaiyars* or shepherds (*idai*=middle) who first lived in the tracts which lay between the hills and the plains watered by the rivers. In the drier and sandier tracts (*pálai*), developed a race of adventurous tribes such as the *Maravar* (the man of valour) and the *Kallar* (the man of strength) who turned to soldiering or brigandage. People of the sea-sore (*neydal*) were either fishermen and sailors or merchants. The merchants of the coast districts settled later in the interior and among them are the Chettiyars, who are now the backbone of the banking and commercial communities. The farmers *(ulavar)* inhabiting the river-valley *(ulu nilam)* are represented in the State by the *Vellálars* (the rulers of the flood) who first learnt to convey the water of the river through canals to the fields, and the *Kárálars* (the rulers of the clouds) who stored the rain water in tanks and úranies or drew it from wells and springs for irrigation.

Along with the representatives of these ancient Tamil tribes, we find in the State the representatives of the Aryan culture of the north. In South India the thought, life and culture of the ancient Tamil and of the Northern Aryan met and fused, and the culture history of the South is the history of the interaction of the two.

Customs and manners.—The customs and manners of the people of the State do not differ much from those of the surrounding districts.

Villages and Houses.—With the single exception of Tirumayam, the towns and villages are unwalled and the houses are generally built in streets, the Brahmin, Sudra, Mussalman and Panchama quarters being separate. The wants of the village people are few, and these are locally supplied by the village artisans, barbers, etc. The great majority of the people live in thatched houses of which many are single-roomed buildings built of mud without windows and with a single door for both man and beast. The wealthy live in tiled or terraced buildings. Nattukkottai Chettyars have built numerous large, ornate and very substantial homes.

The number of occupied houses in the State was 81,565 in 1931, against 58,449 in 1881. But in 1931 only 341 villages out of a total number of 435 were examined by the census officers in order to classify houses as terraced, tiled, and thatched houses. Out of a total of 73,708 houses thus examined, 60,166 were thatched, 10,373 tiled and 3,169 terraced.

The houses of the poorer classes contain very few articles of furniture. There are generally mats which supply the place of chairs and beds, some earthen vessels to hold water and for cooking, a few oil lamps of potstone and a flat round stone for grinding curry powder, etc. More than fifty years ago, brass vessels were very rare even in the houses of the middle class. For religious ceremonies in which the use of used mud vessels is prohibited, brass vessels had to be borrowed from the few that had them. Every family had a *chembu* (a small brass pot)

and a drinking-cup of brass. Spoons were sometimes of iron, but often cocoanut-shells with wooden handles were used as spoons or ladles. Pots and lamps of potstone, mud pots and dishes were other articles in use. China and enamelled vessels were rare. Now, cheap brass vessels, china, and aluminium vessels are very commonly used in villages.

Plantain leaves, which could not be obtained in large quantities in the State, are rarely used to eat off except on ceremonial occasions. Metal plates (தாலம் or வட்டில்) were in extensive use but are very rarely to be met with now. Dried leaves of the banyan (Ficus bengalensis) and purasu (Butea frondosa) are now largely used as plates.

Those not authorised could not in those days use umbrellas. Leather slippers and wooden sandals were in use, but even these were rare.

Accounts, documents, letters and books were written on palm-leaf (cadjan) with an iron stylus (எழுத்தாணி). This practice has not entirely disappeared. Accounts, for example, are still sometimes written in this way even by wealthy Chetty money-lenders. About a hundred years ago, rough brown paper manufactured at Mannargudi, came into fairly extensive use. Later, white Goa paper called பால்காகிதம், which was considered at the time a luxury, came into use.* Schoolboys wrote with sticks of ochre on black wooden tablets measuring about 15 inches by 8 inches, instead of slates. Either porcupine quill or a bamboo stick sharpened at the tip was used to write on paper.

Dress.—The ordinary dress of an adult male consists of two thin cloths. The long waist-cloth or *Veshti* is tied on formal occasions by passing it round the waist and between the legs and tucking the ends in. This method of tying it is called *Kaccham*. Generally it is simply tied round the waist and not passed between the legs. The upper cloth is *angavastram* which is worn in the fashion of a Roman toga, or thrown over the

* In the 18th century, the rulers of the State used paper when they had to write to the Nawab and important British officers.

shoulders folded. Children up to about five years of age generally wear no clothes and little boys go about with only a strip of cloth just sufficient for decency, while very young girls wear a metal fig-leaf attached to and hanging down from a string tied round the waist. The cloth worn by the women is known as the *pudavai* or *selai.* It is from 12 to 18 cubits in length and is wound round the waist with one end hanging down in folds while the other end is drawn up over the breast and passing over the shoulder is drawn across the back and tucked in at the waist.* The *kusavan* assumes different shapes and positions with the women of different castes and sub-castes, and in a few sub-castes it is absent altogether. Girls and young women wear a shorter piece of cloth (*sittádai*) which they tie however like that of their elders. Petticoats are now very commonly worn by girls and young women in the richer families. A tight-fitting bodice (*ravikkai*) is now coming into vogue among all classes except the poorest classes. Red is considered to be the auspicious colour for women's clothes but widows only wear white.

Ornaments.—The essential ornament of every married woman, whose husband is alive is her *táli* or *pottu*† which is

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* The method of wearing the *Sàri* (*pudavai* or *Sèlai*) may be described thus in the words of Miss Billington (quoted by Mr. William Crooke in his book "Things Indian")—

"A woman makes a few pleats at one end in her hand,—the cloth is then wound several times round the body from waist to knee, and at last brought over the right shoulder and down to the left side, so as to fall in front in ample folds." Women of some castes however bring it over the left shoulder.

† The *tali* or *pottu* being the symbol of wedded life, is the most important of a Tamil woman's jewels. Some castes wear *talis*, while others, *pottus*. The *pottu* is a small disc of gold while the *tali* is a gold ornament often in the shape of M but assuming different descriptions for different castes. "The Vallamban and Nattukkottai Chetti women suspend a small globular pendent, called *tumbu*, from their *talis*, or marriage badges, suspended from the neck, and the Maravan women wear two *talis*, one large and the other small. The Nattukkottai Chetti women, even when poor, usually have costly *talis*; some of them are ornamented with valuable gold pendents and are said often to be worth thousands of rupees." (Mr. Hemingway: *The Trichinopoly District Gazetteer.*) Small gold beads are strung on either side of the *tali* or *pottu*.

attached to a string or gold chain and is hung round the neck. There are special ornaments for the nose, ears, head, neck, arms, wrists, fingers, the waist, ankles and toes. Many of these take the form of rings such as bracelets, anklets, armlets, toe-rings (பீலி), nose-rings (புல்லாக்கு) and ear-rings. "The ear becomes finally the most bejewelled part of a woman's person."* The women of many non-Brahmin castes dilate the lobes of their ears. An *olai* † of gold or gold set with precious stones is inserted in the lobe; some castes have in the place of the *olai*, a small cylinder of gold known as *pùcchikkùdu*. The ear is also bored and small studs called *koppu* are inserted. Coral, pearl or gold beads are often worn as bracelets. The following extract from M. Sonnerat's *Voyage to the East Indies and China* written more than 150 years ago applies to the present day. "The rings spring on the leg and, when the women walk, they make a noise with which they are much pleased. They colour the palm of the hand and the sole of the feet with red made from the infusion of the leaves of Mindi ‡ and draw a black circle round the eyes to indicate their vivacity. Some castes rub the face and body with saffron. Neck-laces of gold and silver hang on, and down, their stomach. Their ears are pierced in several places and fitted with jewels, and their love for these ornaments is so great that they even wear them in their noses." With the advance of education women's apparel is becoming at once simpler and more refined and ornaments are becoming rarer but more elegant.

Gold is supposed to be dishonoured by being worn on the feet except by members of a royal family. Flowers, especially those that have been presented as an offering to some deity, are worn in the hair. It is also common for women to plait their

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* Mr. W. Francis: *The Madura District Gazetteer.*

† *Olai* (lit. the leaf of the palm). A strip of palm leaf is rolled up and inserted into the dilated lobe of the ear. But among the well-to-do classes, a large gold stud, often set with stones, has taken the place of the palm leaf.

‡ 'Mindi' = henna (Lawsonia alba) Tamil-மருதாணி.

hair into a long braid to the end of which they attach silk tassels while scented flowers are sown on to the plaits.

Food.—Except for a few higher castes such as Brahmins and some sub-castes among non-Brahmins such as Vellalars, meat is a common article of food. Mutton, fowl, fish, hares and birds are the common varieties of animal food; pork is less common, while rats, crabs, squirrels, etc., are eaten by the lowest classes, some of whom eat beef also. In the poorer houses, the morning meal is taken between 7 and 8 a. m. and consists of cold rice (rice soaked in water and kept over night) with butter-milk, and some pickle, chutney, or sauce, or *conjee* (gruel) of ragi, cumbu, or cholam. At midday or in the case of the working classes during supper at 8 or 9 p. m., comes a course of cooked rice, vegetable sauce, or greens and pulse with soup or *rasam* (pepper water); the meal ending with a dish of rice and curd or butter-milk. Along with rice, dholl, ghee, vegetable oils, butter-milk and spices enter largely into the food of the middle and upper classes. Black-gram is an essential ingredient of all cakes. Pepper, mustard, coriander, turmeric and asafœtida are the principal spices. Vegetables, peas, roots and greens of different varieties are much in evidence in the cuisine. The fruits most commonly used are mangoes, citrons and limes. Salt, tamarind and chillies are largely used for seasoning.

Drinking and smoking, though not universal, are common enough with many castes. Chewing betel or tobacco is more common.

Games and Amusements.—The village drama (often known in Tamil as நாடகம் in its refined, and தெருக்கூத்து in its unrefined form) is the most important amusement. The plot is generally taken from the *Rámáyaná* or *Maháhbháratá* or other classics; the life of Rámá, the wanderings and sufferings of the Páṇḍavás and their consort, the patient Droupadi, the martyr Harischandra or Naḷá or the devotee Márkaṇḍeyá who escaped Death, and the tragic fate of Kóvalan or Nallathaṅgáḷ are the principal themes of perennial interest. The play is staged in a temporary shed

in some open or central space; the audience squat in the open air, chewing chatting or occasionally snoring under the soporific effect of the songs sung by the actors or roar with laughter at the antics of the buffoons. The performance lasts from 10 p.m. till about day-break and is continued next night from where it broke off previously. Plays sometimes last for several nights.

A less expensive amusement is for young men or young women to form a ring and dance.

There is the manly game known as *manjivirattu* or *jallikattu*. The day on which this will be held is previously advertised by tom-tom in all the adjacent villages. At about eight o'clock in the morning a number of bulls to the horns or round the necks of which the owners have tied pieces of cloth, are let loose to the sound of tom-tom and the shouts of the people. Those taking part in the sport endeavour to catch and stop the bulls in their wild career and remove the cloths. Those who succeed are the heroes of the day and are entitled to the money that is tied within the cloth. This sort of bull-baiting is held in different Kalla villages in succession and lasts for about two months, beginning on the day succeeding the ***Pongal*** festival in January. Bull-baiting in the Tamilnad has been a pastime for ages past, and there is a vivid description of it in the ***Kalittogai*** (a collection of poems belonging to the sixth century A. D.). The following is a specimen of the songs describing the sport which is poetically called 'embracing the bull.'

"The bulls knew that the herdsmen had jumped into the stall with the desire to embrace them and pricked them with their horns..........................

"O, young maid, see this (feat of strength), here. He, the son of the buffalo-herd, will not return without quelling its strength; he has sprung on the rough back of the fighting bull and embraced it like a garland. Maid, here (another), the son of the cowherd, will not cease to fight; he is dancing on the (back

of the) speckled bull looking like a man punting a canoe in the stream. In the sporting field to which many people have come, the herdsman has embraced the black bull which came like the wind and has crushed out its strength, thus appearing like the Lord (Siva) when he broke with his feet the neck of Yama who rides on a buffalo and deprived him of life. To look at the fight strikes my mind with terror.

"O, young maid, see this feat of strength. Here he, the son of the shepherd, is lying on the side of the strong white bull like the black spot on the moon. Behold the strength of the herdsman who is wearing the garland of Kaya flowers; he has caught hold of the ears of the red bull that rushed on him with limitless speed, and quelled its strength, thus appearing like Máyón when he caught the horse with a beautiful mane sent by his enemies, tore open its mouth and beat it with his fist. To behold it strikes my mind with terror." *

Mr. Francis makes the following observation about this game in the Madura Gazetteer:—"To do this (to capture the cloths tied to the horns) requires fleetness of foot and considerable pluck and those who are successful are the heroes of the hour. Cuts and bruises are the reward of those who are less skilful, and now and again some of the excited cattle charge into the onlookers and send a few of them flying. The sport has in consequence been prohibited on more than one occasion; but, seeing that no one need run any risks unless he chooses, existing official opinion inclines to the view that it is a pity to discourage a manly amusement which is not really more dangerous than foot-ball, steeple-chasing or fox-hunting."

Cock-fights and quail-fights are favourite out-door sports. Pigeon-flying matches are also held. Two or more breeders let loose in the air their pigeons, and the one whose flock remain on the wings longest and succeed in decoying a good number of the birds of the rival flock is the winner.

* Translation by Professor P. T. Srinivas Iyengar.

Men and boys play cards, marbles, hopscotch, games such as *tacchipara* (a form of dice played with cowries) and *pulikattan* (a game like chess), fly kites and go in for one or two more violent games such as *kittippandu*, *pillayárpandu*, both something like rounders, *bali* (a game in which one player has to catch the others while holding his breath) and *uppukódu* (a complicated game consisting in hopping over a diagram marked on the ground). In playing *uppukódu* several straight lines are marked on the ground a few yards apart. One party runs over the lines while the other party opposes their advance. *Bali* is also known as *gudu gudu*. The players divide themselves into two teams; the players of each team in turn run one after another across the line and try to touch as many of the opposing team as they can, holding their breath all the time. *Pulikkattan* (known also as *padinettámpulli*) is a game of the type of the chess played with pebbles as 'pieces' called 'dogs' or 'goats' on one side and 'tigers' on the other. The former have to try to check the latter without getting taken or 'killed.'

Silambam a sort of single stick play, is both an exercise and an "art of offence and defence." Leap-frog and tip-cat (*Kittippullu*, a game played with sticks) are also popular.

Women play few games. They often amuse themselves with group dances, such as *acháponga* or *kummi*. A common performance is the *kóláttam*. The performers hold a stick in each hand and move in various figures, each constantly striking her sticks against those held by others in rhythm. Girls play a number of games with tamarind seeds or cowries. Hide-and-seek is another favourite game, and equally popular is a form of hopscotch known as *pándi*. The game of *ottayó rettayó* is also common; one player takes a handful of cowries or seeds and closing her hand asks the other whether the number of seeds is odd or even. If she guesses correctly, she gets all the seeds. Otherwise her opponent gets them.

Superstitions, etc.—"Omens and superstitious beliefs," writes the late Mr. Hemingway, "are deeply regarded. It is a

good omen to hear a bell ring, a cannon go off, an ass bray or a Brahmani kite cry, or when starting out from home to see a married woman whose husband is alive, a corpse, flowers, water, milk, a toddy pot, night soil, or a washerman. It is also a good omen to see a jackal or fox passing from right to left; but it is a bad sign to see the sembottu bird (the Indian cuckoo, "copper smith bird") cross one's path from right to left. Indeed the proverb says 'go not a step forward if you see a *sembottu* bird going from right to left, but a crown awaits him who sees a fox do this." It is also a bad omen to hear sneezing, or directly after leaving the house to see a single Brahman, a widow, a shikari, a snake, oil or a cat. It also bodes ill to the inmates if an owl or a vulture, a Brahmani kite, or a *Sembottu* bird perches on the roof of a house, or if a bee-hive, ant-hill, a snake or a tortoise is found inside it or if the walls crack. ....Some omens foretell specific occurrences. Thus if the clay-building wasp (*kulavi*) nests in a house, it foretells the birth of a child, and the call of a crow indicates the arrival of a guest." To this list many others may be added. The chirping of a lizard in particular directions is a sign of luck and in others a sign of ill-luck. Dreams are also believed to forebode good or ill luck.

Devils are supposed to possess men, and still more often women; and their evil influence is warded off by sorcerers who make incantations and tie talismans to the bodies of the persons afflicted. The influences of the evil eye and black magic are likewise warded off by incantations. Certain herbs are believed to have talismanic properties and are hung round the neck or tied to the waist-string. A child is generally given a nick-name so that the real name may not be pronounced and used by magicians to injure the child. Various motives influence the choice of names. The name of an ancestor believed to be re-incarnate in the child (usually the grand-father or grand-mother) is given to the child. Names are commonly given with a religious motive, and children are named after Gods, Goddesses and holy rivers, not simply by way of invoking their protection

for the children, but also to afford frequent occasions for pronouncing their names and thus securing merit. Occasionally the names of the God or Goddess of the place where a person resides, are given; thus children born at Tirumayam are called Satyamurti or Vénuvanésvari, those born at Tirugokarnam bear the names of Gokarnésa and Brahadambál or Periyanáyaki and many men at Vaittur bear the name of Tálavanam. Children born as a supposed result of vows performed receive appropriate names; thus a child born after a pilgrimage to Rameswaram is called Rámanáthan or Parvatavarddhini, after one to Benares, Viswanáthan or Visálákshi, and after a visit to a snake shrine such as Péraiyur, Náganáthan or Nágammal. Occasionally pet names are given for the following reasons:—no woman may call her father-in-law, or mother-in-law, and since their names are given to their grand-children, as has been explained already, the women, to avoid pronouncing them use instead pet names, such as Raja (king), Tangam (gold), Chellam (pet) and Kulandai (child). There is a belief that a child born after several children born before it have died will be saved from evil influences by being given opprobrious names such as Kuppuswami (lord of refuse). Indian Christians generally bear Tamil abstract names, with Christian names prefixed thereto, such as John Asirvadam (blessing), Joseph Sargunam (virtue) and Samuel Gnanavolivu (the light of wisdom).

It is commonly believed that a man's pains, sorrows, diseases, etc., can be transferred from the sufferer to an animal or a thing. Thus a person, who is ill, is often beaten with sprigs of the neem or margosa tree (Azadirachta indica) to which his trouble is supposed to be transferred. Occasionally, a whole community is supposed to be relieved of all its troubles at a blow. Such a riddance is supposed to occur on the day after the Sankaránti, when the *pidai* (evil influence) of the preceding year, called Kanuppidai, is shaken off and people make a fresh start in life. The various *dánams* or 'gifts to Brahmins' are examples of transference of evils, in which the donee is supposed

to receive the troubles of the donor along with the gifts, and is often required to perform some expiatory ceremonies to get rid of them.

The offering of a part of a worshipper's own body is a common rite. We may, for example, refer to the presentation of *ex-voto* oflerings, such as silver or gold eyes, feet, ears, or other organs and also to the offerings to Gods of miniature cradles with or without images of children in them and of bangles, by women who have borne children, or been cured of sickness through the supposed intervention, of the Gods.

Various methods are resorted to in order to look into the future.

Astrologers are often consulted, some of whom rely on special treatises on Nádi-sástram, Árúda-sástram, etc., (books dealing with the art of prediction). Future is often taken to be revealed by casting lots before a deity.

Sámiyádis (lit. God-dancers) are attached to the temples of the village godlings, and, under inspiration, they reply to questions put to them. The temple priest with his *odukku* or drum shaped like an hour-glass causes the God or devil to take possession of himself or some one else sitting in front of him, and the person possessed then becomes an oracle. In "telling fortunes," Korava women here take the place of Gipsies in Europe.

Reaction to the impact of modern conditions.—Extreme instances of departure from past customs are afforded by late marriages and widow remarriages. The Sarda Act in British India declared marriages of girls under 14 illegal. Marriages performed in contravention of this Act are punishable, but are not invalid. This Act has not been brought into force in the State, and people from British India escape the penalty under the Act by celebrating the marriage of girls under 14 within the Pudukkóttai State. There is a clear tendency in the State even among castes that have stood for the sanctity of early or pre-puberty marriages to postpone marriages to a

much later age. Widow remarriage, though it is not now visited with the amount of persecution that it incurred in the past, has not become common among communities which have not hitherto practised it. There is however, a tendency for some castes which hitherto practised it, to deprecate it in imitation of the others. Owing to economic circumstances, marriage ceremonies tend to become less elaborate; and it is now a common thing for even the highest castes to finish in one day the ceremonies that were ordinarily spread over four or five days formerly. The expansion of female education has tended to delay the consummation of child-marriages, and not infrequently postpone the marriage itself till the studies are over.

The joint-family system is weakening, in consequence of the improvement of communications and of western ideas rendering the outlook of our university young men more individualistic. But the real attack on this age-long institution comes from the new economic forces that are operating in the land to-day.

Changes in diet and dress are coming about; but they cannot be called radical. In matters such as hair dressing and shaving, there is a rapid break-away from the old standards. Top-knots (*Kudumi*) and beards are becoming rarer. Women are fast discarding the old ponderous jewellery. They are no longer, "animated savings banks." Perfumes and similar toilet luxuries are coming into greater use.

Social bans are losing in rigidity. Excommunication as a penalty for foreign travel has become a thing of the past. Less importance is now attached to unapproachability and even untouchability. Conditions of public service, and civic life, help to undermine this system. The railway and the motor-bus may complete its destruction. The ameliorative activities of the Darbar, and, for example, the throwing open of all educational institutions to the depressed classes, have helped to develop self-respect in the Adi-Dravidas and remove the 'superiority complex' in others.

Even in the purely social aspects of life, a great change is coming about. The urban life has changed considerably. The old indigenous games have given place to cricket and foot-ball; the old village plays to dramas with a modern setting and stage appurtenances and to cinemas and "talkies." The old cottage industries have disappeared before the cheap mill-made goods; creating a grave problem indeed—the problem of rural unemployment amongst a people mainly agricultural and depending for harvests on a precarious rainfall. Hoarding of money and putting it to unproductive uses are slowly disappearing before the spread of the co-operative movement.

SECTION III.—RELIGION.

i. Hinduism.—Various gods are worshipped in the State. Each village has its own special guardian deity. Woods, ravines and hills are supposed to have one or more indwelling spirits. Invocation alone is not considered sufficient to appease such deities; they have to be propitiated by the sacrifice of some animal—the cock, the goat or the buffalo. Grain or cooked food mixed with blood are offered on their altars. The ritual is partly religious and partly magical and is accompanied with the beating of tom-toms, drinking and dancing.

The worship of the serpent (Naga) and of plants and trees such as tulasi or basil (*Ocimum sanctum*), the bael or Vilva (*Aegle marmelos*), and the asvatta or peepul (*Ficus religiosa*), is perhaps a relic of old totem-cults. The serpent has now come to be identified with Murugan or Karttikeya (*Subrahmanya* of the Aryans) and is also venerated as the ornament of Siva and the couch of Vishnu (*Anantasayanam*). The *tulasi* is an emblem of Vishnu, the bael, of Siva, and the *asvatta*, of all the three gods of the Hindu trinity (Brahma, Vishnu and Siva). The *Aganánúru* (the earliest anthology of ancient Tamil poems collected in the IVth or Vth century A. D.) mentions a number of gods who are now mostly identified with Hindu deities proper.

Offering oblations to *Pitris* (the spirits of the ancestors), or otherwise showing them honour is universal with all classes. The memory of women who died as *Sumangalis* (i.e., predeceased their husbands) is honoured in many homes. "The spirits of those who have died violent deaths are often worshipped, under the name of *Pattavans*, by the family of the deceased, generally with the idea of preventing them from doing harm." * Heroes and martyrs are also worshipped as *Pattavans* and temples are built in their honour. Similar honours are paid to women who performed *Sati*, and places where this rite was performed are called Málaiyídu (málai=garland), because garlands are offered to the souls of *Satis*.

The *dvijas* (the twice-born castes) now seldom perform *yágams* (sacrifices); but the domestic fire-rites, still linger in their homes. The *aupásana* fire (fire which is worthy of *upásana* or worship), which strictly speaking should be kept burning perpetually and fed with daily oblations of cleaned rice and with cooked rice on new-moon and full moon days is now kindled temporarily on such occasions as the *Sráddha* when oblations are made to the *pitris* or whenever any *grihya* or domestic rites are performed.

The most important daily rite of the Brahmans is the worship of the *Sandhyá*, which consists chiefly in purifying the body, in offering handfuls of water as oblations to the Sun (conceived as the symbol of divine effulgence) and in the repetition of the *Gayatri* mantra. The other daily rites such as the *panchayagna* consisting of offerings to the gods (*dévayagna*), giving *pindás* (rice balls) to the *pitris* (*pitruyagna*), feeding birds and animals (*bhútayagna*), feeding men (*manushyayagna*), and studying the Vedas (*brahmayagna*), are not now regularly performed except in a few orthodox homes.

The Hindu satisfies his craving for the adoration and service of a personal God by worshipping images set up in His

* Hemingway: *Trichinopoly Gazetteer*.

honour. There are innumerable temples in the State, in which the Supreme Being is worshipped under one of the names and forms of Vishnu (the sustainer of the Universe), Siva (the giver of wisdom, the great healer of ills and the destroyer of desire), Devi (the mother of the Universe), Súrya (the Sun), Ganesa, Ganapati or Pillaiyar (the remover of all obstacles), and Subrahmanya (the lord of knowledge). The Tamil name for a temple *koil* also means a palace, (*ko* or *kon*=king, il=house; cf. Malayalam. *Koilagam*=palace, *illam*=Nambudri house). "As the king gaily decked in silk and gold, rode in elaborately decorated wooden cars on various occasions, so the idol was bathed, dressed, bedecked, and bejewelled, placed on a gorgeous car full of splendid carvings and dragged through the four principal streets round the temple." *

Such ceremonies are still performed in the temples. Worship in the home is offered to the *Sálagrámam* (fossil ammonite) representing Vishnu, and the *lingam* symbolising Siva. "Smartas," as Thurston remarks, "use in their domestic worship five stones, viz.—(1) *Sálagrámam* representing Vishnu (2) *Bánalinga*, a white stone* representing the essence of Siva, (3) a red stone (jasper), representing Ganesha, (4) a bit of metallic ore representing, Parvati and (5) a piece of pebble or crystal, to represent the Sun. The worship of these five is known as *Pancháyatana púja.*† To the cultivated Hindu the different Gods whom he worships under different symbols are all manifestations of the One God.—

एकं साद्विप्रा बहुधा वदन्ति ।

—*Rig Veda, i-164-46.*

(*Ékam satviprá bahudhá vadanti*)—there is only one Being whom the wise call by many names.

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* Prof. P. T. Srinivas Iyengar.

† The *Banalingam* is either white or black. It is described as a "small oval agate" by W. crooke "Things Indian."

The more intellectual among the Hindus are often devoted to the study of the *darśanas* (the systems of Philosophy), the most important of which is the *Védánta.* The *Védánta* has three *prastánas,* (authoritative works)—the *Upanishads* of the Védas, the *Sútras* (aphorisms) of Bhádaráyana, and the *Gita*, the discourse between Sri Krishna and Arjuna. The *prastánas* are taught in the Sanskrit Pátaśálas, and scholars proficient in them are rewarded with gifts of money by the Darbar during the Dasara festival. The three principal schools of the *Védánta* that claim Sri Sankara, Sri Rámánuja and Sri Madhva as their *Ácharyas,* have a large following in the State.

For many centuries the "heretical" sect of Jains, (known in Tamil as *Samanas*) flourished in the State. The asceticism of the Jains was even more rigorous than that of the Brahmana, and monks of their order retired to natural caves where they devoted themselves to systematic mental training, and fasting, and finally eschewing food and drink, sometimes starved themselves to death (*sallekhana*). The natural cavern on the Sittannavasal hill was one such hermitage. There are now no Jains in the State. The frescoes in the rock cut temples at Sittannavasal, the remains of a structural temple at Seṭṭipatti and images of Tírtankarás or Jainás at various places (Seṭṭipatti, Vírakkudi, Annavásal, etc.) sometimes cut on rocks (Ténimalai and near Ammáchattram) are all that now remain to .bear witness to their once flourishing culture. There are several Jain images in the State Museum.

The outward expression of Bhakti or devotion to a personal God was very much developed between the IX and XIII centuries. Singing and dancing (Bhajana) form the essential features of devotional religion together with the reading or reciting of the deeds of the Gods and their incarnations,—Rama, Krishṇa, Sivá and Murugan. The *Rámáyaná*, the *Mahábhárata*, the *Bhágavatá* and the *Puránás* both in their Sanskrit and Tamil versions, the lyrical and devotional outpourings of the Saiva saints, Appar, Sundarar,

Sambandar and Máṇikkavávhagar, known as *Tevâram* and *Tiruváchagam*, and of the Vaishṇavá saints like Nammáḻvár, Tirumaṅgaiáḻvár, Áṇḍáḷ and others known as the *Tiruvâimoli prabandams*, and the hymns to Subrahmaṇya by Aruṇagiri, known as the *Tirupugal*, have entered largely into the religious life of the Hindu population.

The Hindu sects do not attempt to proselytise, nor is there any great organisation in the State to conserve the religious faith of the people. The followers of the Advaita school offer homage to the Gurus of Kumbakonam (the Káñchi Kámakóṭi piṭha) and of Sriṅgéri founded by the great Sri Saṅkara. The Guru of the Kumbakóṇam Piṭha has a large following within the State, and since he is the Guru of the ruling family, honours are accorded to him during his visits to the State; the Guru of the other and ancient mutt of Sriṅgéri also receives high honour. The spiritual heads of the Ahóbilam and of the Vánamámalai mutts have a large following of Vaishnavá disciples in the State, while the Madhvás owe allegiance to one of three mutts—the Vyásaráya mutt, the Uttarádi mutt and the Sumatindra mutt. The Saivá sects, especially the non-Brahmans, pay homage to the Saivá mutts, the *Pandára Sannidhis*, seated mostly in the Tanjore District. The Chettis of Vallanád have their own guru in their midst while the Náṭṭukkóṭṭai Chettis receive spiritual instruction from their gurus of the Kiḷámaṭam and Pádirakkuḍi maṭam in the Rámnád District. The Theosophical Society, had a good following in the State, but is not now very prominent. Evangelical reform movements such as the Brahma Samáj and the Árya Samáj have not made any headway in the State; but the revivalist movement inspired by the followers of Sri Rámakrishṇa and Vivékánaṇda has had more success.

The welding of the old religious forms of the Tamils with the new ones that the Áryans brought with them has resulted in a religious system which is aptly described by Sir Monier Williams: "Starting from the Veda, Hinduism has ended in embracing

something from all religions and in presenting phases suited to all minds. It is all-tolerant, all-compliant, all-comprehensive, all-absorbing. It has its spiritual and material aspect, its esoteric and exoteric, its subjective and objective, its rational and irrational, its pure and impure. It may be compared to a large polygon or irregular multilateral figure. It has one side for the practical, another for the severely moral, another for the devotional or the imaginative, another for the sensuous and sensual and another for the philosophical and speculative. Those who rest in ceremonial observances find it all-sufficient, those who deny the efficacy of works and make faith the one requisite, need not wander from its pale,...................those who delight in meditating on the nature of God and Man, the relation of matter and spirit, mystery of separate existence and the origin of evil, may here indulge their love of speculation." The Hindu feels that owing to differences in the construction of human intelligence and owing to the different levels of spiritual perception in different persons, there should be differences in the methods of worship and in spiritual concepts, affording scope for men of varying mental and emotional moulds. Sri Krishna says :—

येऽप्यन्यदेवता भक्ता यजन्ते श्रद्धयाऽन्विताः ।
तेऽपि मामेव कौन्तेय यजन्त्यविधिपूर्वकम् ॥ —(*Gita IX-23*).

Those devotees who endowed with faith and reverence (Sraddha) worship other gods, they too worship Me alone...........(though by different methods). The Hindu believes that wherever there is greatness, power or glory, there is a part of the one God's splendour.

यद्यद्विभूतिमत्सत्वं श्रीमदूर्जितमेव वा ।
तत्तदेवावगच्छ त्वं मम तेजोंऽशसंभवम् ॥ —(*Gita X-41*).

In this faith the worship of the old village and totem gods are still allowed to continue, the higher classes occasionally participating in the worship. Some of these are male divinities, while others are female and the latter are the more dreaded. Some of them are associated with the major Gods as their attendants or offsprings or destructive manifestations.

There are other demons which are believed to be the spirits of men and women who have committed suicide or died suddenly. Their souls are supposed to be admitted neither to heaven nor to hell, but to be condemned to hover about in company with other devils and to afflict mankind. "The majority of the devils are supposed to dwell on trees*, some wander to and fro and go up and down in uninhabited wastes, some inhabit old wells, some skulk in shady retreats and ruined temples. It often happens that a devil will take a fancy to dispossess the soul and inhabit the body of one of his votaries, in which case the personal consciousness of the person or party ceases and the screaming, gesticulating or pythonising are supposed to be the demon's acts." In such cases exorcism is resorted to by Pújáris or priests and professional magicians. Oblations to the devils consist of meat, grain, toddy, cigars, and bread. When a village is afflicted with some trouble, such as the blight of crops or an epidemic, a great expiatory feast is held, in which the enraged deity is represented by a pot (*karakam*) decorated with margosa leaves and flowers, which is carried through the village with great honour and to which a number of sheep and fowl are sacrificed. The deity is ultimately carried to the border of the village, where the pot is broken to pieces, and the evil spirit is supposed to be removed by this process from the afflicted place. Occasionally the *karakam* consists of as many as seven pots placed one above another.

Some of the godlings worshipped by the lower classes will now be named and described.

Aiyanár.—When, at the Puránic churning of the ocean (Amrithamathanam) by the Gods and the Asuras, their opponents, a pot of ambrosia came up, Vishnu undertook to serve it

* Whenever a particular tree that was supposed to be the habitation of a devil was required by the Sirkar, Sir A. Sashia Sastriar used to quiet the fears of the people by issuing a notice to the devil, pointing out that another tree remote from common resorts had been specially selected for its abode and that after a fowl or a sheep had been sacrificed to it in front of its original tree, it should remove itself to the new tree.

to all of them and assumed the form of Móhini a goddess of bewildering beauty. Siva, who was absent, wanted, when he heard of this, to see Vishnu in that female form, and when Vishnu gratified his desire, Siva embraced Vishnu with the result that Sásta or Aiyanár was born, who is also called Harihara-putra, i.e., the son of Siva and Vishnu. His wives are Púrana and Pushkala and his vehicles, the horse and the elephant. He is represented with a red skin, a crown on his head and a sceptré in his right hand to show that he is the king of the lower deities. He is the preserver of good order and peace. In front of his temple rude terracotta or even brick and mortar horses and elephants often of considerable size are arranged to form a sort of avenue. He is supposed to use these to patrol the village at night. These shrines are very picturesque and very characteristic of South India. Adoration is paid to him even by Brahmins and no meat is offered to him.

Mannárswami, is said to partake of the nature of either Siva or Subrahmanya. There are some who connect him with the god Vishnu at Mannárgudi.

Kátteri is a female deity and *Irulan*, a male. There is a legend that Párvati, wife of Siva, once offended her husband and a curse was laid on her that she should become a Kshudradevata an inferior deity, on the earth. She implored Siva to follow her and they descended to the earth as Káṭṭéri and Irulan. According to another account, Káṭṭéri is the wife of the hunter Siva who fought with Arjuna.

Pidári is a well-known goddess supposed to be very violent like the goddess Káṭṭéri. Her name is a corruption of Píḍai-hari, "remover of evils." She is represented in a sitting posture with a drum, a snake, a trident and the skull of the fifth head of Brahma.

Káttavaráyan. When Párvati had once incurred the displeasure of her Lord and was ordered to descend to the earth and there excavate tanks and form flower-gardens, Káttavaráyan

was created as the *watchman* of the gardens. His adventures, including accounts of his amours with his Idaiya, Brahmin and Chetti mistresses, are given in a book called "The story of Káttavaráyan."

Karuppar is supposed to be a form of Vishnu. He is of a dark-blue colour like Vishnu and is known under various names such as *Pathinettámpadikkaruppar* (i.e., the God Karuppar of the 18 steps as at Alagarkoil near Madura). *Sangilikkaruppar* or Karuppar of the *chain*, has as his shrine what is known as a *kombálayam* or a seat on the bough of a tree, of which the different parts are connected by an iron chain.

In many temples a God called *Mun-adián* or *Mun-ódi* can be seen, who may be described as the herald of the God of the temple, the name meaning literally head-servant or fore-runner. He is represented with a crown on his head and with lion's teeth.

Munis are persons of abnormal powers acquired by *tapas* (austerities) who are supposed to be alive and to help such as seek their favour.

Droupadi and her husband *Dharmaputra* are often worshipped. A short account of Droupadi's festival and of தீமிதியல் or 'fire walking' performed in connection therewith may be given. It is a festival lasting 18 days on which the Mahábhárata is read, and such as have made a vow to walk through fire must abstain from women and lie on the bare ground. On the eighteenth day their heads are crowned with flowers and their bodies decked with saffron, and they come dancing to the fire, stir it to increase its activity, rub their foreheads with its ashes and walk either fast or slow according to their zeal over a very hot fire, extending to many feet in length. Some carry their children in their arms and others bear lances, sabres or standards. Droupadi married five brothers at the same time. Every year she left one and passed to the arms of another, but first took care to purify herself by fire. Such is the origin of this singular festival.

Viran or Madurai-Víran is said to have been a watchman in the service of Bomma Náyak. He fell in love with a princess of the Madura Náyak family and suffered for it. His spirit is worshipped as that of a hero. It is said that the godling once became subject to a magician and, when he was asked how he would prove his subjection to him, offered him the use of his legs. The magician declared thereupon that the godling would afterwards be called Nondi-Víran or the 'lame Víran.' Viran used to be specially invoked by Kallars before their cattle-lifting expeditions.

A woman who dies before her husband (*Sumangali*) is worshiped as *Púvádaikkári* (wearer of auspicious things, or one with the smell of flowers), one who dies unmarried is worshipped as Kanniamman, and one dying as a widow is occasionally worshipped as Kulamári.

Mádan, *Sámban*, *Pethannan*, *Sinnán*, *Malukkan*, and *Mutyáluravuttan* are spirits of persons who died violent or unnatural deaths.

Of these Máḍan is supposed to have the face of a bull with the body of a man. He is said to be very fond of the burning ground, and is therefore occasionally called *Sudalai-Mádan.*

Ecchil-pei, which is supposed to be always hungry, *Kolli-vái: pisásu*, which is supposed to emit flames from its mouth and corresponds to Will of the Wisp, and *Móhini-pisásu*, which is supposed to be always seeking sexual connection, must be classed as evil spirits.

The Kannimárs are manifestations of Bhagavatí or Párvati. wife of Siva, and are enumerated as 1. Bráhmi or Sarasvati. 2. Máhésvari or Párvati. 3. Kaumárí. 4. Vaishṇavi or Lakshmi, 5. Váráhi. 6. Máhéndri or Indraní. 7. Chámundi or Káli. They are also called in Sanskrit *Saptamatrika's.*

The other minor goddesses are :—

1. Ellammá or Ellai-ammá, the boundary goddess. [There are some that interpret Ellammá to mean *Sarvámbá* or the all powerful-goddess.] She is supposed by many to be no other

than Rénuka, and the first account that is given below* of the origin of Máriamman is taken to apply to her. In her temples may be seen the figures of—1. Jamadagni, her husband, 2. Póttu Rájá (=bull-king), her herald, 3. Mallaka Chetti, a hero who helps her in battle, 4. Parasuráman, her son, 5. உயிர் தூண்டிற்காரர், "Angels of Life," who, having themselves died violent deaths, catch in a net those that die such deaths and bring them to Ellammá, who herself died such a death, 6. Mátangi, the Paraiya woman, to whose trunk Rénuká's head was joined, 7. Vignésvara and 8. Bhadra Káli.

2. Sellammá or the "dear goddess."
3. Ekáttá, the sole mother.
4. Tántóni Ammal—the self-created goddess.
5. Ponni Ammál—the golden goddess.
6. *Angálammá* (live-coal goddess). Angála Paraméswari was created by Siva to help Virabhadra, leader of a host of demons, in preventing Daksha, son of Brahma, from performing a sacrifice, and slaying those who were assisting him in doing so, because Daksha had not invited Siva himself, and Siva's wife, Sati or Dákshayani, (Dakshá's own daughter) to take part in it. Another account of Angála Ammál is that she was the spirit of a Brahmin girl, given in marriage to a Chandála (outcaste) who had learnt the Vedas. The girl, when she learnt the truth, is said to have set fire to her house and so perished. Her husband is said to have become the chief of the devils and to be known as *Periyatambirán*. There is another account of *Periyatambirán*, according to which he was the deity whom Daksha had intended to enthrone in the place of Siva.

Máriamman.—There are two or three different accounts of Máriamman. According to one she was originally Rénuká, the

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* See under Mariamman.

† See Ziegenbalg's *Genealogy of the South Indian Gods.* உயிர்தூண்டிற்காரர் is referred to as தூண்டில் in the well-known Tamil book, "Nandan Charitram." The phrase "Angels of Life" is taken from Dr. Oppert's Original Inhabitants of Bharatavarsha.

wife of Jamadagni and mother of Parasuráma. Her husband, suspected her of having been unchaste in thought. He therefore ordered his son Parasurama to cut off her head. As a reward for his ready obedience he promised Parasurama a boon, and he thereupon asked for his mother to be restored to life. The father directed him to join her trunk and body together and repeat a prayer that he taught him. But Parasurama in his haste, by a very singular blunder, joined the head of his mother to the body of a Paraiya woman, called Mátangi, who had been executed for some crime. The result was the goddess Máriamman. The gods gave her the power of curing small-pox. She is represented with a winnow and a broom-stick, as befits a Paraiya. She is supposed to live in the neem or margosa tree, (Azadirachta indica) and a person suffering from small-pox is not allowed to scratch himself with anything except the twigs of this tree. According to another account, Sakti, the female divine essence, was sent by the Gods to crush the Asuras against whom they had been unable to prevail in battle. She marched against them, afflicted them with severe attacks of small-pox, and thus vanquished them. A third account is that she was a Brahmin girl, who unwittingly married the son of a Chandála (untouchable) woman of the name of *Pecchi**. Some call the seven Kannimárs her daughters, and *பாவாடைராயன்*, a male deity represented as wearing a petticoat, her son. This god is said to be always in a state of excitement induced by hemp, drugs, wine, etc., and is therefore called *Ganjáveriyan*, *Sárayaveriyan*, etc.

Máriamman is extensively worshipped in Southern India. She is held in great veneration and is known as *Ammá* or *Tái* (=Mother) and *Periammá* (=the great Mother). As the goddess of small-pox, she is called *Márimuttu*, *Mahámáyi*, *Nallamuttu*, *Muttyálammá* and *Sitalammal*. Near her temple are found the figures of Virabhadra, Mátangi, Káttavaráyan mentioned above and *சக்குபாந்தடிக்காரர்*, her door-keepers who carry big clubs.

* This resembles the account that is given above of Angálamman.

Special seats of her worship in the Pudukkóttai State are seven in number, viz., Nárttámalai, Vaittikkóil, Konnaiyúr, Tennaṅgudi, Tiruvappúr, Kannanúr and Ilaiyánúr to the east of Tirumayam. At the first three of these places, hook-swinging was practised till it was stopped by Sarkar order in 1876. Those who imagined that they had received a great benefit from the goddess or wished to obtain them, made a vow to suspend themselves in the air. A strong post about 10 feet high was fixed perpendicularly on the ground, on the top of which a long pole was fixed in such a manner that it would revolve as on a pivot. One end was weighted and to the other end a kind of chair was attached in which sat the devotee, who was hoisted up and swung by hook fastened in his flesh.

Among the forms of self-torture still practised to please this Goddess may be mentioned walking on wooden shoes with spikes sticking out of them; dragging a car four or five feet high by means of ropes attached to hooks fastened in the flesh; measuring the whole distance to a place of pilgrimage with the length of the body by lying down and rising alternately; rolling all the distance to a place of pilgrimage; holding an arm constantly erect until the blood ceases to circulate in it; wearing a 'mouth-lock,' which is an instrument usually made of silver and worn with a pin stuck through both the cheeks between the teeth so as to keep the mouth open; and passing a silver spike through the tongue.

Vows.—Vows are commonly made at the shrines of deities by all classes. The higher classes make offerings to celebrated shrines outside the State such as Tirupati, Vaithísvarankoil, Palni, Swámimalai and Tirucchendur and to several shrines of Venkatésa and Subrahmanya, within the State. A very common vow made by those desirous of offspring is that, if a child is born to them, they will shave its head for the first time at the shrine of the deity invoked or will hang a cradle there. The votive offerings may be ears of paddy jewels, gold or silver representations of the parts of the

human body supposed to have been cured by the deity, or simply milk or sugar carried in a *kávadi.*

Festivals :—Numerous festivals are held all the year round. The New Year's day falls in April for Tamils, and in March or April for Mahráttas, Kanarese and Telugus. The *Dasara* or *Navaratri* is a ten days' festival devoted mainly to the Goddess Dévi.* It is a season of great devotion combined with mirth and amusement. Worship is performed in every household; and the womenfolk and children amuse themselves with displays of dolls and statuettes in wood, marble, clay, soapstone, etc., and singing, and dancing *Kummis* before them. It is the principal festival in the State and is a great socio-religious function. Special worship is performed in all the temples and His Highness the Raja participates in the worship. Charity is doled out on a large scale. Brahmins are fed in thousands, and presented with rice doles and cash. Sanskrit and Tamil Scholars throng to the capital from different parts of South India and exhibit their erudition. On the last day, they are given *Sambhávanas* or money presents varying according to the degree of their proficiency and scholarship. The ninth day is known as *Sarasvati puja* or *Áyuda puja*, a day devoted to worshipping the goddess of wisdom and all weapons, instruments, tools, etc. The scholar 'worships' his books, the carpenter his tools, the chauffeur his motor car and so on. On the tenth day, the festival closes with a State procession of His Highness to the shrine at Tirugokarnam. This is known as *Vijaya yátra* or the march to victory in commemoration of the victory of the Gods over the Asuras or the demons. A few arrows are shot off in the presence of the Raja and the deity to symbolise the victory. The *Dipávali* (literally "the garland of lights")

* During this festival, Devi, the Mother of the Universe, is worshipped in her triple aspect of Power (Durga), Wealth (Lakshmi) and Wisdom (Sarasvati). As Durga, she is worshipped in the first three days, as Lakshmi in the second three, and as Sarasvati in the last three. Special worship is performed to all the other Gods also during this festival.

festival in October—November is intended to commemorate the destruction of the monster *Narakásura* by Sri Krishna. The festival is observed by taking oil-baths early in the morning which is considered equivalent to bathing in the Ganges, putting on new clothes, and letting off crackers, and other fire-works. The *Sankaránti* or *Pongal* is another very popular festival celebrated in January on the day of the sun's transit to Capricorn. Rice newly harvested or supposed to be so is boiled in milk with dal (pulse) and sugar, and after it has been offered to the gods, especially to the Sun is partaken of. Next day cattle are decorated and their horns painted with green and red and they are fed with rice boiled with sugar and milk. On the third day the *Jallikattu* or *manjivirattu* described above is celebrated. Sri *Rámanavami*, the birthday of Rama, which occurs in March—April, *Krishna jayanti* or *Janmáshtami* the birthday of Krishna in August, *Sivarátri* a day holy to Siva in February—March, and ***Vináyaka chaturti*** in August—September, holy to Vináyaka or Ganésa are other festivals popular among all the higher classes. The new-moon days, of which those in ***Thai*** (January-February), and *Ádi* (July-August) and (***Mahálaya amávasya***) (August-September) are very important, and the days of the transit of the Sun from one Zodiacal sign to another are all sacred to the spirits of the departed, who are propitiated with offerings of sesamum and water. *Upákarmam* or ***Ávaniavittam*** is a festival peculiar to the "twice-born" castes. It is a survival of the old custom of commencing the study of the Védas at the beginning of the monsoon season. On this day Brahmins and other "twice-born" castes put on new ceremonial threads (*Yagnopavita*) and go through the formality of beginning to read the Védas. The *padinettám perukku* or eighteenth day of *Ádi* is an important festival observed by all classes. It takes place when the rivers of the Cauvery delta are in flood. The eleventh days of the lunar fortnights (***ekádasi***) and the full-moon days are

days of fasting. The days of the asterism *Krittika* are holy to Subrahmanya. *Kámanpandigai* festival of the Hindu God of love, Káma, occurring in March, is observed generally by the lower classes to commemorate the destruction of Káma by Siva. In the months of *Mási* (February-March) and *Arpisi* (October-November) an early morning bath in a tank or river is considered to have special religious efficacy. *Vaikási* (May-June) is specially meritorious for charity. The dark fortnight in September (*Mahályapaksha*) is sacred to the souls of the dead. *Márgali* (December-January) is a month given to the worship of the gods which is conducted just before sunrise throughout the month.

ii. **Muhammadanism.**—The Muhammadans in the State observe the five principal acts enjoined in the *Qurán*. They are (1) the recital of *Kalima* or short confession of faith—'There is no deity but God and Muhammad is the apostle of God.' (2) *Sulat*, the five prescribed daily periods of prayer and preparatory purification, (3) *Roza*, the thirty days' fast of Ramzan, (4) *Zakat*, legal alms, and (5) *Hajj* or the pilgrimage to Mecca. There are secondary duties such as obedience to parents, circumcision and the shaving of the head and body.

The following are some of the principal Muhammadan feasts and fasts:—

(1) *Muharram*, days of mourning in the first month of the Muhammadan year, in commemoration of the martyrdom of Ali and his two sons.

(2) *Bara-Wafat*—the anniversary of the day of the death (or, according to some, the birth) of the Prophet. At this festival sandal is placed in a vessel, carried in procession and distributed.

(3) *Ramzan* (with *Id-ul-fitr*). Fasting in Ramzan month is one of the essentials of Muhammadan religion. All pious Mussalmans abstain from food and drink from sunrise to sunset in that month. The Prophet used to say of this month that "in it the gates of paradise are open, the gates of hell are shut and the devils are chained by the leg." On the day of *Id-ul-fitr*,

the feast of the breaking of the fast, which is the first day of the month following the *Ramzan*, the people put on their best clothes, distribute alms and give themselves up to revelry.

(4) *Baqr-id* or the feast of sacrifice. Every Mussalman should keep the feast by sacrificing an animal and preparing his meal from its flesh. The *Baqr-id* and the *Id-ul-fitr* are the two great feasts of Islam.

The title of *Pir* is given to Muhammadan preceptors, and, after death, the *Pirs* are venerated as *Walis*, *Owlis* or Saints. The sepulchres of *Walis* are called *Dargahs* or shrines, where flowers, sweetmeats and fruits are offered. There are in the Pudukkottai State dargahs of Walis at Káṭṭubávápaḷḷivásal, Andakkulam, Vayalogam and elsewhere. (See the Gazetteer below).

The Mussalmans in the State belong to one or other of the classes or tribes, known as—*Pathan*, *Sayyed*, *Sheik* and *Labbai*. *Pathans* who claim Afghan descent number nearly 1,000. *Sayyeds* who are reputed to be descended from the Prophet and hence held in high esteem, number 770 and the *Sheiks* about 2,000. *Labbais* are the offspring of Arab traders and Hindu women. They speak Tamil and are generally known as *Marakkáyars* or *Rávuttars*; the latter, meaning 'horse-soldiers,' is the more familiar name. They number about 74 per cent of the total Mussalman population and are enterprising traders.

The relations between Muhammadans and Hindus are normally friendly.

iii. Christianity.—

CHRISTIAN MISSIONS:—(a) *Roman Catholic*. The earliest references to the Christian Missions are contained in the letters of the Madura Mission which, besides furnishing an account of Jesuit activities in Southern India, supply ample information about the social and political conditions of the times to which they refer. The first allusions to Pudukkóṭṭai territory relate to a Kallar chief Meycondan of Nandavanampatti on the border of the State. The letters refer to him as a likely convert

and a generous prince. Ávúr in the Kolattúr taluk was the first place in the State to be occupied by the Jesuits of the Mission. It appears that it was granted to them in the 17th century by a chieftain of the Perambúr—Kattalúr tract referred to in the Mission letters as the chief of Kandelúr. Here a fine Church, which still exists, was built, and the celebrated Missionary Rev. T. Venantius Bouchet carried on his labours. After the fall of the Perambúr—Kattalúr palayam, Ávúr came under the Kolattúr and Pudukkóṭṭai Tondaimans, and apprehensions were entertained of persecution by the new rulers. These fears however proved groundless. It was in the first year of the rule of Raghunatha Raya Tondaiman (1686—1730) at Pudukkóṭṭai that Ávúr was finally fixed as "a new Catholic central settlement in the tract to the north of the Marava country;" and one of the princes of the Kolattúr line—Ramaswami Tondaiman by name—is said to have "developed a marked respect and veneration for the Christian religion, its teaching, its ceremonies and symbols and especially for the symbol of the Cross." In 1713 Ávúr secured official recognition as a sanctuary and asylum for Christian debtors; and official guards were set about this time over the Church and its precincts on festival occasions to prevent disturbances.

Three years later, that is in 1716, during the war with the Náyaks the Church at Ávúr was destroyed by the Tondaiman soldiery in a moment of general panic and confusion on the pretext that the building might be converted by the forces of Chokkanátha Náyak into a fortress. But that the unhappy incident was not inspired by any feelings of hatred, or spirit of persecution is evident from the circumstance that in the ten years (1717-1727) that followed, Pudukkóṭṭai territory served as a place of refuge for Fr. Bertholdi and other Christians who were subjected to ill-treatment at Trichinopoly and other places in the neighbourhood.

About 1732 occurred the invasion of the Pudukkóṭṭai territory by Chanda Sahib. Ávúr was then occupied by the

enemy, and the well-known Tamil scholar and Missionary, Rev. Fr. Beschi, who was in temporary charge of the place was seized and ill-treated. He was subsequently released when Chanda Sahib learnt who he was.

In the years 1745 and 1746 the outlook for the Christians was gloomy. In the first of these years an attempt was made to exact from them a contribution for building a car for a Hindu temple at Pudukkóṭṭai. In the next year the Tondaiman paid a visit to Tirumayam, and hearing that the Christian population in the place had corrupted the old religion and manners of the country issued a general mandate for the destruction of all the Churches in his territory. But the order was fortunately reconsidered and cancelled.

In the meanwhile the Jesuit Missionaries incurred unpopularity owing to their methods of proselytisation. These were condemned by the Pope in 1744, and the Society of Jesus was itself suppressed in 1773.

For another twenty years or so, however, some ex-Jesuits stayed on in Pudukkóṭṭai territory and continued the work. In the year 1794, Ávúr became a bone of contention between the Pondicherry Foreign Mission and the Portuguese or Goanese Mission. The former took its stand on Papal authority, and the remaining ex-Jesuits joined its ranks. The Goanese Mission claimed jurisdiction through the extinct Madura Mission, contending that the Ávúr Church was an offshoot of the Madura Mission which had itself been "attached to the Portuguese Mission Province and depended ecclesiastically on the Padruado Archbishop of Cranganore on the West Coast." Four Syro-Malabar priests, or catenars as they were called, also arrived on the scene determined to assert their rights. They were soon left in undisturbed possession of the field, the Pondicherry Mission retiring from the area under the orders of the Madras Government. One of the Catenars was *Periya* Yagupar (Jacob) whose activities extended over Ávúr,

Trichinopoly, and Malaiyaḍipaṭṭi. He is reputed to have built several chattrams and a car at Ávúr.

Meanwhile the Jesuits were reorganised in 1814, and Fr. Granier of the order settled in 1838 at Trichinopoly. The possession of Ávúr which was so near to it became once again a matter of dispute, this time between the Jesuit Mission and the Goanese. In 1846 the differences between them became so acute that each side attempted to oust the other by resort to violence; and the then Raja and Political Agent of the State had to interfere. The situation became still more unpleasant in 1857 when the jurisdiction of the Goanese Mission over these areas was distinctly recognised by the Pope. The differences were however composed and the two missions afterwards worked for more than seventy years without any friction.

In 1930 Álaṅguḍi and Tirumayam taluks were taken away from the jurisdiction of the Jesuit Fathers of the Trichinopoly Diocese and handed over to the Portuguese (Padruado) Diocese of San Thome de Mailapore, Madras. In these two taluks there are four parishes namely, Pudukkóṭṭai, Sammanasúr, Koṭṭaikaḍu and Veṅkatakuḷam with about 11,000 Catholics.

In the Kolattúr taluk, Trichinopoly Diocese has two parishes, namely, Nanjúr and Ávúr with 10,000 Catholics.

(b) Protestant.—According to a letter dated 1849 of Mr. Parker, Political Agent, the Protestant Missionary congregations at Pudukkóṭṭai were originally established by Rev. John Casper Kohlkoff of the Church of England 'between whose father and himself, 110 years of Missionary labour were divided.' In the thirties of the last century the work was in the hands of a society of European and Indian workers at Madras called the Indian Mission Society. One of their catechists—'an energetic man' established a footing in the town and opened some schools in the villages. At the instance of Mr. Blackburne, the Political Agent, the Mission also received grants of land from the State.

In 1845 the Indian Mission Society made over its work to the American Mission at Madura, and for the next three years catechists and teachers of the latter body were sent to Pudukkóṭṭai to carry on the work. By the end of this period the number of Protestants and Protestant Mission schools in the State had increased to 190 and 13 respectively.

But owing to paucity of hands, the American Mission was unable after a time to spare the men required for the work, and therefore in 1848 it made an offer of the Pudukkóṭṭai territory to the Leipzig Lutheran Mission which this body willingly accepted. "The Mission was formerly an enterprise of several Lutheran Churches in Germany, France, Russia and Scandinavia. One of the stations where the Swedes worked and took special interest in was Pudukkóṭṭai. In 1901, when the Church of Sweden Mission and the Leipzig Mission divided the working-field between them, Pudukkóṭṭai was given to the Swedes."

Until 1855 no Missionary was stationed in Pudukkóṭṭai, and the work that was carried on was at best spasmodic, desultory and irresponsible. The first Missionary to live here was the Rev. K. A. Ouchterlony " a young Swede, born in Stockholm though of Scottish parentage." With a true Missionary spirit he devoted himself to his new field, and with admirable faithfulness and a cheerful spirit he carried on his hard and often thankless work. In his humble dwelling Ouchterlony not seldom received visits of the then Raja who took such a liking to him that he jokingly used to call him his Court Chaplain, often invited him to his palace, and gave him a harmonium for use at the divine services.

The history of the subsequent years may be briefly chronicled. A Mission Bungalow was built in 1870. A Primary school which the Mission maintained in the town was raised to the status of a Lower Secondary School in 1884 and to that of a High School in 1906. It has since been provided with convenient and commodious quarters for the boarders.

For a long time the Mission held divine service in the school building and in a small chapel within the Mission compound. By 1905 the chapel had become too small for the town congregation, and a Church to hold about 400 persons was built in that year, with funds raised partly in Sweden and partly from local contributions. It was consecrated "on the 6th of November 1906, the year as well as the date being of significance in the history of the Protestant Church, because in that year two centuries had elapsed since the first Protestant Missionaries had landed in India, and on the 6th of November 1632 the Swedish hero King Gustavus Adolphus fell on the battlefield of Lutzen in defence of Protestant faith and rights."

In 1921 the Tamil Evangelical Lutheran Church was founded, and it was entrusted to the care of the established congregations of the Swedish Missions along with the elementary schools. Pudukkóṭṭai and Tirupattúr with surrounding villages form one pastorate under an Indian pastor. Next to Pudukkóṭṭai town, Kóttaikarampatti has the largest congregation in the State, with its own church. The Pudukkóṭṭai Village Mission was started in the year 1926 by Rev. and Mrs. P. F. Summerson, with Pudukkóṭṭai town as its centre. It is chiefly doing evangelistic work.

Other sects:—There are now a few families in the State belonging to the Malabar Syrian church. They are mostly officers in State Service and their families.

SECTION IV.—CASTES AND TRIBES.

General tendencies.—Many of the so-called lower communities now show a tendency to exchange their traditional caste names for designations that appear to them more respectable. A section of the Pariahs in the Madras Presidency "offered their thanks to Lord Pentland and the Madras Government for giving them the name of Panchama. They would not welcome it now. The question of names has been much in the attention of the leaders of these communities in

the past ten years and to this is attributed the popularity of the term Ádi-Drávida."* A still more recent title is Harijan. The educated among the Ádi-Drávidas often append the title *Pillai* to their names; but the latest style is to call oneself, for example, C. Swami Esq. *Idaiyans* (shepherds) and a few other classes wish to be called *Yádavás*; *Patnúlis* (silk-weavers), *Souráshtra Bráhmins*; *Kammálans* (artizans), *Visvakarmá Bráhmins* after Visvakarma, the divine artizan (lit. "world-maker;") and so on. If the census figures given against the different castes and classes in the subsequent paragraphs show in many cases marked variations compared with the previous censuses, the differences may be explained by this tendency to adopt more stylish titles which was very marked during the last two census periods.

However, the caste system which has survived for ages shows no very marked signs of decay. "Caste prejudice is not a monopoly of Brahmins. This has been frequently said but will bear repetition. It is in fact more prominent at the lowest level of the community than at the highest. The washermen who attend to the needs of Ádi-Drávidas must marry amongst themselves; the ordinary Ádi-Drávidas will not provide a bride or even eat at the wedding feast. Ádi-Drávidas will not drink from a chuckler's well and so on. Paḷḷans and Paraiyans do not live in the same village........" †

The Brahmins.—‡ (11,769) The Brahmins are divided into Smártás (Advaitins), Vaishṇavás and Mádhvás, according as they follow one or other of the three great original expounders of the Védánta, Sri Saṅkara, Sri Rámánuja and Sri Mádhva. They are divided into exogamous septs or *Gótrás* tracing descent from one or other of the *Rishis* and also into *Sútrás* or sects

* Mr. M. W. M. Yeatts, I. C. S., Superintendent of the Madras Census Operations.

† Mr. M. W. M. Yeatts I. C. S. in the Madras Census Report, 1931.

‡ Figures in brackets after the name of a caste or tribe indicate the number of persons belonging to it according to the census of 1931,

according to the Brahminical canons to which they own allegiance. Some of these Sútrás are—

(1) Ásvaláyana Sútra of the Rig-Véda.

(2) *A.* Ápastamba Sútra, Baúdháyana Sútra, Bháradvája Sútra, Satyásháda Hiranyakésa Sútra and Vaikhánasa Sútra of the Krishṇa (black) Yajur Véda,

B. Katyáyana Sútra of the Svéta (white) Yajur Véda, and the

(3) Dráhyáyana Sútra of the Sáma Véda.

In the State, Ásvaláyanas, Ápastambas, and Baúdháyanas are commonly met with. The followers of the Vaikhánasa Sútra are mostly priests in Vishṇu temples.

The subdivisions, which we shall find most convenient to follow, in dealing with the Brahmin community, are the five divisions known as the Pancha Drávidas, viz.,

1. The Drávidas or Tamil Brahmins.
2. The Ándhras or Telugu Brahmins.
3. The Karnátakas or Canarese Brahmins.
4. The Mahéráshtras or Désasthas or Maráthi Brahmins.

and 5. The Gúrjaras or Gujarati Brahmins of which class there seems to be no family in the State.

The Tamil Brahmins of the State are again subdivided into (1) Vaḍamás. (2) Brahacharanams. (3) Ashtasahasrams. (4) Váttimás. (5) Vaishṇavás. (6) Gurukkals or the priests of the Siva temples. (7) Nambiárs or Bhattars, who are Vaishṇavite priests, and (8) Prathamasákhins. Among these subdivisions, there is no intermarriage.

Váttimás are the ***Mádhyamás*** or men of the middle-country that is Central Provinces. The Vaḍamás, or "Northerners," are divided into Cholá Vaḍamás or Vaḍamás that came to the Cholá country first, and northern Vaḍamás who came later. The subdivisions of the Brahacharanams, the Ashtasahasrams and the Váttimás are generally named after the villages in which they originally settled.

Prathamasákhins are found in the village of Talinji in Kolattúr Taluk. They form an exclusive community, called "Midday Paraiyás," because a Rishi is said to have laid a curse upon them in consequence of which they became Paraiyás for a period at noon daily.

The Vaishṇavás worship Vishṇu and his consort Lakshmi or Sri as the supreme deities. They wear on their fore-heads a caste-mark of two white lines symbolic of the holy feet of Vishṇu with a red or yellow line representing Lakshmi between them. The *Vadakalais* draw the white lines more or less in the shape of a U and the *Tenkalais* in the shape of a Y. On the occasion of *Samásrayana*, the ceremony of initiation, they bear on their shoulders the impress of the discus and the conch, the emblems of Vishṇu. There are two major sects among them,—the *Vadakalai* and the *Tenkalai*. The *Tenkalais* chant Tamil verses in their rituals in place of Sanskrit mantras and prayers. Both recite the *Divya Prabandha* consisting of the hymns in praise of the Lord, sung by the Áḻvárs or the Vaishṇavite Saints. Both believe in the doctrine of *Saranágati*, or surrender to the will and grace of God, as the sure means of attaining Salvation or *móksham*. The *Vadakalais* hold that to achieve *Saranágati* the first step is to submit to the guidance of a spiritual preceptor (ácházrya). They attribute equal rank and power to Vishṇu and Lakshmi, and regard the latter as the interceder with the Lord on behalf of suffering souls. But the *Tenkalais* rank her second to Náráyaṇa or Vishṇu, though above all the other Souls. They also say that God in His infinite mercy will Himself take care of erring Souls even without their asking; that is, they preach the doctrine of absolute dependence on God and Salvation by faith and not by works.

(ii) *Telugu Brahmins.* The Telugu Brahmins in the State are divided into

(1) the *Niyógis* or *Laukikas*, who came from the North as officers, civil or military,

(2) the *Vaidiks*, of whom many seem to have come south originally as Purohits and some as officers. They are subdivided into Murikináḍu or Mulakanáḍu Brahmins, Vélináḍu Brahmins, Végi or Vénginádu Brahmins, Karnakamma Brahmins, Telingana Brahmins, etc.

and (3) the *Kónasíma* or *Kónasamudram* Drávidás, etc. These are Tamil Brahmins who settled in the Telugu country, adopted the Telugu language and customs and then returned to the Tamil land.

(iii) and (iv) The Canarese and Mahrátta Brahmins are divided into Smártás and Mádhvás. The Mádhvás stamp their body and forehead every day with the emblems of Vishṇu.

The principal ceremonies or samskárás prescribed for the Brahmins are *námakaranam* (giving a child its name), *annaprásanam* (giving it rice for the first time), *choulam* (shaving its head), *upanayanam* (investing it with the sacred thread), and *Viváham* (the wedding ceremony). Formerly the parents of the bridegroom had to pay a large sum to the parents of the bride as is even now the case among Gurukkals and Bhattars, but among other classes a very high price (in some cases amounting to thousands of Rupees) has to be paid for the bridegroom.

In olden times the proper functions of the Brahmins were—learning the Védas, teaching the Védás, performing sacrifices for themselves and others, receiving gifts, and bestowing such gifts on others; and in consideration of their performing these, they were given grants of land free of tax. Nowadays they have largely monopolised the superior and clerical grades of Government service to an extent that has compelled Government to take special measures in order to secure a substantial leaven of other communities and castes. In addition they predominate in the learned professions, but have also taken to trade, and business of all kinds.

The Valaiyans.—(27,916) These form an important section of the population of the State. They are supposed to have been so called from *valai*, a net, because they originally netted game in the jungles. Their usual titles are Ambalakáran, Védan and Śérvai. They are divided into several endogamous sections, of which the chief are the Valuvádis, Śaraku Valaiyans and Véda Valaiyans.

Among the Valaiyans, adult marriage is the rule, and the consent of the maternal uncle is necessary. The táli is tied by the sister of the bridegroom. Divorce is permitted on payment of the price paid for the bride; the male children go with the husband while the divorced wife keeps the girls. Widows may remarry. They cremate their dead except those who have died of small-pox; these they bury. A household is regarded as ceremonially polluted for 16 days after death has occurred in it, and for 5 days after any girl in it has attained puberty. The usual occupations are snaring birds, fishing, agricultural and manual labour, and collecting honey and medicinal herbs. They will eat almost anything, including rice found in ant-holes, rats, cats, dogs and squirrels.

The Valuvadis.—(3,304) Valuvadi is a name assumed by prosperous Valaiyans as a mark of superior social status. Valuvadis are found at Peruṅgaḷúr, Vadakáḍu and Máṅgáḍu. They worship the god of the Sástankóvil near Tirumayam and Subramaṇyaswami of Nagaram in the Tanjore district.

The following note is taken from Thurston's *Castes and Tribes* of *Southern India,* (1909) "*Valuvadi,* was originally a term of respect, appended to the name of the Nagaram Zamindar. Some Valayans in prosperous circumstances and others who became relatives of the Nagaram Zamindar by marriage have changed their caste name Valayan into *Valuvadi.* Thirty years ago there is said to have been no Valuvadi caste."

The Kallars.—(22,124) Like the Valaiyans, these form, a large proportion of the population of the State. They are divided into a number of endogamous sections called Náḍus

such as Ambu Náḍu or Anbil Náḍu, to which the family of His Highness the Rája belongs, Álaṅguḍi Náḍu, Unjanai Náḍu, Sóttruppálai Náḍu, Sengáttu Náḍu—East and West, Kulamaṅgilya Náḍu, Páppá Náḍu, Pálaiyúr Náḍu, Valla Náḍu, Vadamalai Náḍu, Tenmalai Náḍu, Kásá Náḍu, Visaṅgi Náḍu, Kíḷ Senkili Náḍu, Mél Senkili Náḍu, Perumánádu, Koḷattúr Náḍu, Vírakkuḍi Náḍu, and others numbering in all about fifty. In the eighteenth century the Kaḷḷars were notorious robbers. But agriculture has converted most of the Kaḷḷars in the State into peaceful citizens. The Ambu Náttu Kaḷḷars follow Brahmin usages and do not permit the re-marriage of widows or divorced women. Among other sections of the Kaḷḷars divorced women and widows are permitted to remarry. Caste problems and disputes are settled by the elders of the nádu, but sometimes the Periathanakáran or "the chief man" is the arbitrator. The dead are generally burnt and pollution is observed for sixteen days after a death. Each Nádu has a separate temple, where the Nádu assembly meets. Every Nádu has several exogamous divisions-பட்டப்பெயர். Some of the Nádus and their exogamous divisions will now be mentioned.

(*a*) Ambu Nádu has over twenty-five exogamous septs, such as Tondaiman to which His Highness the Rája belongs, Malavaráyan, Pallavaráyan, Ráṅgiyan, Mannavéḷán, Rájáḷi, Tennathiraiyan, Káliṅgaráyan, Kaliyarán, Mákáli, Valaṅkoṇḍán, Panrikonrán, Káduvetti, Thóppai, Sammatti, Adaiyavaḷañján, etc., found in the villages of Vadatheru, Tentheru, Karambakkuḍi, Piláviduthi, Vadakkalúr, Panthuvakóttai, Naraṅgiyanpatti, etc. These follow, as has been already said, the customs and manners of the Brahmins. The following are said to be the exclusive privileges of Ambunáttu Kaḷḷa women:—(1) மூடு பல்லக்கு—(a covered palanquin.) (2) நிலை முக்காடு—(the practice of women covering the body from head to foot when they go out.) (3) மேலேடு—(a kind of ear-rings.) (4) கருகமணி—(a necklace of black glass-beads.) (5) பச்சை and கருவளைவி—(green and black glass bangles) and, (6) ரவிக்கை—(bodices).

The jewels worn by the women are similar to those of the higher classes, such as bangles, necklaces and ear-rings.

(b) *Álangudi Nádu* also has about twenty-five exogamous divisions such as Tondaiman, Vándan, Iruṅgulam, Koppanan, Káḍavarán, Náṭṭaraiyan, Káliṅgarán, etc., who reside in twelve villages, including Álaṅguḍi, Paḷḷattuviḍuthi, Súranviḍuthi, Kiláttúr and Méláttúr. The tradition is that the people of this Náḍu came originally from the Koḷḷimalai hills in the Sálem District.

(c) *Unjanai Nádu*. People of this Náḍu are found in the five hamlets of Pérámbúr, Maruthampatti, Náṅgupatti, Pákkuḍi and Sáranakkuḍi in the territory which belonged first to the Pérámbúr and afterwards to the Koḷattúr chiefs. The *Anjunilaippattu Sardárs*, who were appointed by the rulers of the State to help them in the consolidation of their conquests, belonged to this Náḍu.

(d) *Sóttruppálai Nádu* consists of about fifteen subdivisions, such as Pattukkatti, Púnaiyan, Naraṅgiyán, Koṇḍaiyan, Káḷi, Kóppuliṅgan, etc., residing in the villages of Sóttuppálai, Kallukkáranpatti, Vaḷavampatti, Sóḷaganpatti, etc.

(e) *Káśá Nádu*. This section seems to be confined almost entirely to the Tanjore District, only one family belonging to it is reported to be found in the State.

(f) *Kila Senkili Nádu* is divided into about eighteen septs such as Ulakaṅkáṭṭán, Sóḷagan, Teṅkoṇḍán, Thiráni, Vanniyan, Pálaṇḍán, Váttáchi, Kacchirán, etc., found in about thirteen villages in or near the northern part of the Koḷattúr Taluk, such as Ulakaṅkáttánpatti, Kiḷḷukóttai, Naináripppatti, Villipatti, Kallupatti, Noḍiyúr, Acchápatti, Thacchaṅkuruchi, Maṅganúr, Kósupatti, Kottampatti, etc. The caste panchayats of these Náḍus meet at Visalikkóvil at Visalúr.

(g) *Mel Senkili Nádu* Kaḷḷars are found a little to the west of the Kil Senkili Náḍu mentioned above.

(h) The members of *Kulamangilya Nádu,* bear about eighteen surnames or பட்டப்பெயர், such as Kóppanan, Tévan,

Kalithírttán, Péivetti, Kolipettán, Malukkan, Maṅgulán, Puthukkutti, and Málaiyittán, and live in about eleven villages of the Koḷattúr and Álaṅguḍi Taluks, such as Púnguḍi, Vágavásal, Muḷḷúr, Ucchání, Sembáttúr, Puttámbúr, Vaittúr, Múttámpatti, and Vattanákurichi.

It is said that originally the Kulamaṅgilya Náḍu, Panaṅkáḍu Náḍu (North and South), Siruvayil Náḍu (North and South), Súriyúr East, and Kánádu Kaḷḷars formed only one division and that they afterwards separated, settled in different villages and became separate Náḍus. It is also stated that of late the Kulamaṅgilya Náḍu Kaḷḷars have been contracting alliances with Kavinádu and Súriyúr Náḍu Kaḷḷars.

(*i*) *Sengáttu Náḍu*, consists of about twenty-seven septs, such as Váṇḍán, Nariyan, Kóppan, Panrikutti, Avándán, Pettácchi, Acchamariyán, Pacchaiyan, Váṇḍaiyán, Mánamkondán, etc., living in seven villages of Álaṅguḍi Taluk, such as Kóvilúr, Kuppakuḍi and Koḷunthirákóttai.

(*j*) *Páppá Náḍu.* The Kaḷḷars of this Náḍu live mostly in the Pattukkóttai Taluk of the Tanjore District and only two families of the Náḍu live in Kílakkurichi village of Koḷattúr Taluk. It is reported that many among this Náḍu are vegetarians and will not eat in non-vegetarian houses.

(*k*) *Pálaiyúr Náḍu* consists of about twenty-five endogamous sections, such as Mánaṅkattán, Séplán, Áthi, Ráyan, Sóḷagan, Aṅgaráyan, etc., residing in the villages of Pálaiyúr, Máyanúr, Kuḷavóippatti, Muttupatṇam, Veṇṇávalkuḍi, Véṅkatakuḷam and Kiḷaiyúr.

(*l*) *Vadamalai Náḍu* consists of about thirty-five sections bearing the surnames of Maṅgalán, Maṇḍaiyan, Páláṇḍán, Tettuváṇḍán, Káḍavarán and Kaliṅgaráyan and living in and about Uḍayáḷippatti in the Koḷattúr Taluk. Caste pancháyats meet in the Máriammankóil at Temmávúr. It is said that the northern portion of Kunnaṇḍárkóil village belongs to the Vaḍamalai Náḍu and the southern portion to the Tenmalai Náḍu.

(*m*) *Tenmalai Nádu* is just to the south of Vaḍamalai Náḍu mentioned above. These two Náḍus are mentioned as இருமலைநாடு (*Irumalainádu*) in inscriptions in the adjacent temple at Kunnáṇḍárkóvil. The caste pancháyats meet at Mukkáni Amman Kóvil in Aṇḍakkuḷam. The joint meetings of the pancháyats of Vaḍamalai and Tenmalai Náḍus are held in Kunnáṇḍárkóvil temple.

The boundaries of the Tenmalai Náḍu are given in the following stanza:-

வற்றனு கோட்டை வளருங் குழந்தைநகர்
உற்ற தொருபிரம்பூர் கிள்ளனூர் கூகூராம்
பொன்மலைகொள் ளீசர்தம் பொற்பாதந் தான்போற்றுந்
தென்மலைநாட் டெல்லை வகை.*

(*n*) *Valla Nádu* Kaḷḷars are divided into thirty-six divisions, such as Tambirán, Araiyan, Sámanthán, Soriyan, Munaithirayan, Máḍusuṭṭi, Akattiyan, Mailan, etc., living in twenty villages to the east of Pudukkóṭṭai, such as Tiruvidaiyáppatti, Kotthakóttai, Maṇiambalam, Vándrákóttai, Vallattirákóttai, Máñjanviḍuthi, etc. Their caste pancháyats are generally held in the Siva temple at Tiruvaraṅkuḷam which is the temple of their Náḍu, and they all subscribe for and bear the expenses of one ucchi-sandhi or mid-day service in the temple every day.

(*o*) *Váráppúr Nádu* consists of about twenty-two divisions, such as Karuppatti, Kónéri, Mákáli, Toṇḍaimánpiriyan, Nettaiyan, Séthurán, Kidáthiriyan, Tambirán, etc. These inhabit seven sub-nádus, namely, (1) Váravala-náḍu comprising Váráppúr and Thekkutheru, (2) Thuraippála-náḍu comprising Toṇḍaimanúraṇi, Athiránviḍuthi, etc., (3) Pérámbúr-náḍu which consists of the village of Veḷḷáḷaviḍuthi, (4) Panrisúl-náḍu containing the villages of Valaṅkoṇḍánpatti, Sevalpatti, Ávip-

* The Stanza is rather doggerel than verse. Its meaning is—Vathanákóttai, prosperous Kulandainagar, Pirambúr, Killanúr, and Kúhúr are the boundaries of Tenmalai Nadu whose people worship the golden feet of Lord Siva who holds mount Meru as his bow.

patti, etc., (5) Mélamadaikkóttai nádu comprising the villages of Idaiyapatti, Krishnanpatti, Karuppattividuthi, (6) Punnapanrikuthi-nádu comprising Malaiyúr, Ponnanviduthi, Ariyándi and Títthánpatti villages, and (7) Nával-nádu comprising Sembattividuthi, Sévakanpatti, Uñjinaipatti, Mélaviduthi, Páppánviduthi, Páchikkóttai and Máñkóttai.

(p) *Vírakkudi Nádu* comprises twenty-two subdivisions such as Káduvetti, Sempuli, Víramádan, Kurippan, Mátharán, Malavan, Vándaiyán, Kaniyán, etc., inhabiting about twelve villages including Vándánviduthi, Kílatteru, Tirumanañchéri and Ponnanviduthi to the east of Várappúr Nádu and north of Tánava Nádu,

(q) *Tánava Nádu.* This consists of Vadakádu village.

(r) and (s) *Siruvayal Nádu,* North and South. The caste pancháyats of north Siruvayal Nádu meet in the Kíranúr temple and those of south Siruvayal Nádu in Nárttámalai Siva temple. It appears that the joint meetings of Senkili Nádu, east and west, Malai Nádu, north and south, and Vada Siruvayal Nádu used to be held at the Visalúr temple.

(t) *Visangi Nádu.* This clan resides in the northern portion of the Kolattúr Taluk and were once notorious for dexterity in cattle-lifting and for the commission of grave crimes, especially, robbery and dacoity. These Kallars live in thirty-six villages and claim as their subdivisions, Tenmalainádu, Vadamalainádu, Pirambunádu, Erimañgalanádu, Tirumañgalanádu, Siruvayalnádu, Kásánádu, Korkainádu, Paiñgánádu, Orattanádu, Kónúrnádu, Senkilinádu (east and west), Nírvalanádu, Tennamanádu, Irumbánádu, Vallambanádu, Kavinádu and Kulamañgilyanádu.

They are divided into 156 subdivisions such as Panchavarán, Pandráin, Tettuvándan, Solatiraiyan, Ílatiraiyan, Munaitiraiyan, Vallatiraiyan, Tennatiraiyan, Tenkondán, Kádavarán, etc.

The depredations of this section of Kallars were not confined to the State or the adjoining British districts, but extended to the remotest parts of the Presidency. They gave great trouble

to the Tanjore Rájás, and, until recently, Kaḷḷars of this section were employed as watchmen in the Tanjore district. A house where a watchman of this section was employed was supposed to be immune from their depredations. Generally speaking, however, the class have now abandoned a life of crime for the less precarious occupation of agriculture, particularly the cultivation of ground-nut.

(*u*) *Kavi Nádu* is the tract of land about Tiruvappúr.

(*v*) *Tirumangala Nádu.*—See under Vísangi Náḍu above. It comprises the Kaḷḷars of Sengalúr, Rájápatti and Lakkaḍipatti villages in Kolattúr Taluk.

(*w*) *Perungalúr Nádu* consists of the Kaḷḷars living in the tract bounded by the Várappúr Náḍu on the East, Kulamangilya Náḍu on the West, Kíl Súrya Náḍu containing Vadaváḷam on the South and Panangáḍu Náḍu on the North. The Kaḷḷars of this Náḍu are divided into fifteen exogamous septs, such as Sépḷán, Sénthirán, Pambáḷi, etc.

There are still other Náḍus such as Vágaivásal Náḍu, Paravákkóttai Náḍu, Puṇyarási Náḍu, Mannárguḍi Náḍu, Madukkúr Náḍu, Singavala Náḍu, Kuḷaváippatti Náḍu, Áḷudaiyárkóvil Náḍu, Mínpusal Náḍu, Kuppaittévan Náḍu, K ruvikkarambai Náḍu, Vaḷuvádi Náḍu, and Tuḷasi Náḍu.

The Paraiyans.—(15,633) The Paraiyans have been associated with the land for an exceedingly long time. They live apart from other castes at a distance from the village proper in quarters called Paraicchéri. They are said to be expert in determining disputed field-boundaries.* The

* Those who do so are known as எல்லைபோடி or "boundary runners." Wearing as garlands round their necks the flesh of sacrificed sheep and beating drums tied round their waists, they run on and on till they come back to the point from which they started. "They are very expert in this matter, unerringly pointing out where boundaries should run, even when the Government demarcation stones are completely overgrown by prickly-pear, or have been removed................the only satisfactory explanation of this is that the connection of the Paraiyans with the soil is of much longer standing than that of other castes"—(Thurston).

knowledge of medicine and astrology possessed by Paraiya priests or soothsayers, known as *Valluvars* * shows that they were once a cultured race. Many of them wear the sacred thread during marriages and funerals and at the festivals of village deities. They trace their descent from Brahmin priests. They have eighteen endogamous subdivisions., among, which are Sóliya Paraiyans, Áyá Paraiyans, Ammá Paraiyans, Pásikatti Paraiyans and Kudiraikkára Paraiyans (syces). They are not permitted to enter Brahmin villages nor do they allow Brahmins to enter their villages. If a Brahmin by mistake enters a Paraiya street, Paraiya women follow him with mud-pots, which they break behind him, and then embracing him sing dirges until he leaves the street. The Paraiyas are employed as agricultural labourers, ordinary coolies, Talaiyáris or watchmen, Vettiyáns or grave-diggers and Tóttis or scavengers.

The Sóliya Paraiyans claim to be superior to the other Paraiyans, calling themselves the descendants of Tiruvalluvar the author of the *Kurral.* They are said to have come from the North. They wear the sacred thread during marriages and funerals, practise infant marriage, prohibit widow marriage and enforce strict chastity among their women. Women excommunicated from this section are admitted into some other sections of the Paraiyas. Pollution after the attainment of puberty lasts for 30 days. The dead

* These wear rosaries of Rudráksham (Elaeocarpus ganitrus) beads and carry a collection of almanacs and manuscript books on astrology. They are soothsayers and prepare horoscopes and write charms for people who are ill. They do not mix with the other Paraiyans, and refuse to admit them into their houses. As evidence of the ancient status of the Paraiyas, we may mention that at Melkota, an important Vaishnava shrine, the Paraiyas have the right of entering the temple on three days in the year specially set apart for them; and that in the Tiruvarankulam Brahmótsavam, it is a Paraiya, described in an ancient copperplate as "பாகைவேறி மாகைகுடி...தேங்காய் உடைத்து வடக்கோடும் பறையன்", that has to break a cocoanut before the car starts on the car-festival day.

are mostly burnt. Caste disputes are settled by the Periathanakkáran (the village headman) and the elders of the village, from whose decisions appeals lie to the Pattaraikáran, a higher officer, who is required to be of the Right-hand section * and then to the Désam Chetti * * of Vaittúr, whose decision is final. The Sóliya Paraiyans are said to be divided into seven Nádus, *viz.*; 1. Ponnamarávati Nádu 2. Maruńgai Nádu (Maruńgápuri); 3. Talaikká Nádu (Konnaúr); 4. Kulisai Nádu (Iluppúr); 5. Máva Nádu (Manappár); 6. Kónádu (Tanjore); and 7. Thuruva Nádu (Trichinopoly).

The Ammápparaiyans are so called because the children of a woman of this division called her அம்மா (Ammá) and not Áyá as Áyápparaiya children do, nor ஆத்தா (Áttá) as other Paraiya children do. The rules regulating their conduct are similar to those of Sóliya Paraiyans.

There is a section of Paraiyans, known as Kútthádipparaiyans or dancing Paraiyás. These have Nádus assigned to them and the dancers of each tract confine themselves to it.

Many of the Paraiyans of the State follow the example of Tiruvaḷḷuvar, from whom they claim descent, and weave (coarse) cloths called பறையன் துண்டு.

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* In olden times there were two grand divisions of the people, known as Valangai or the Right-hand section and the Idangai or the Left-hand section. To the Right-hand section belonged

1. The Idaiyars.
2. The Kómattis.
3. The Oddars.
4. The Washermen.
5. The Barbers.
6. The Paraiyans.

and many other castes. The Pattaraikkaran and the Désam Chetti mentioned in the text were men of the Right-hand division. It appears that these Right-hand castes collected subscriptions and conducted the mandagappadis on the seventh day of the festivals of the temple at Viralimalai in the months of *Tai* (January—February) and *Vaikasi* (May—June). (*Mandagappadi* is a ceremony in which the deity is taken in procession and installed temporarily in one or more mantapams or pavillions where it is worshipped, garlanded and so on.)

* * The word *Desam* means country. He is usually the headman who may be said in a manner to correspond to an unofficial Justice of the Peace.

The Pallans—(24,921) These are employed almost exclusively in the cultivation of paddy, and their women are experts in planting and weeding. They are divided into several endogamous sections, bearing names such as Ayyáppaḷḷans, Ammáppaḷḷans, Appáppaḷḷans, Uḻavuppaḷḷans, Kadakappaḷḷans, Káládis, Dévéndra Paḷḷans, etc. [See the *Gazetteer* Chapter below under Mélattániyam.] Appáppaḷḷans and Ayyáppaḷḷans are so called, because the children in these sections call their fathers Appá and Ayyá respectively. A similar reason is given for the name Ammáppaḷḷan. Kadakappaḷḷans derive their name from the baskets (*kadakams*) that they make. Uḻavuppaḷḷans are ploughmen. Káládis are wanderers or "people who leg it." Many of them are supposed to be professional thieves. The Paḷḷars live, like the Paraiyars, in streets of their own, and a perpetual conflict about caste privileges goes on between these two castes, who belong respectively to the Left-hand and the Right-hand section. The whole of the State is divided into seven Pallan-subdivisions or nádus, viz.—

1. Vadasiruvásal Nádu (In and about Kíranúr).
2. Tensiruvásal Nádu (To the south of Nádu No. 1).
3. Kulamaṅgilya Nádu (In and about Sembáttúr).
4. Kavinádu (In and about Tirugókarṇam).
5. Paraṅgi Nádu (In and about Virálimalai).
6. Kónádu (Other parts to the north of the Veḷḷár).
7. Kánádu (Parts to the south of the Veḷḷár).

To arbitrate in disputes there is an Úrkkudumban ('the village family man'), appeals against whose decisions are taken (first) to Náttukkudumban, the corresponding authority for the nádu, and, if necessary afterwards, to Éḻunáttukkudumban, the head man of all the seven nádus together, at Pudukkóttai. The Sóliyappaḷḷans are a subdivision of the Dévéndra section of the Paḷḷans and are so called, because they came from the Chóla country. They are regarded by the other Pallans as inferiors.

The Idaiyars.—(25,251). This name is derived from *idai* or இடை—middle, it being supposed that the Idaiyars originally lived with their cattle in the pasture lands between the hilly regions and the arable tracts. It appears from ancient Tamil classics that they came to Southern India long ago. They are mostly worshippers of Sri Krishṇa and are thus Vaishṇavites. According to the local legend there were originally about a thousand families of Saiva Idaiyars in and about Tiruvaraṅguḷam in Vallanádu, who claimed descent from Tirumuḍikanḍa Tirumalaikkón or 'the shepherd named Tirumalai, that discovered the god' that lay concealed at the place Tiruvaraṇgulam. [See the Gazetteer under Tiruvaraṅguḷam]. The Vallanádu Idaiyars are said to be their descendants. These shepherds conduct the morning service at the Siva temple at Tiruvaraṇgulam and celebrate a *mandagappadi* on a day of the grand annual festival there. The Idaiyans, to some extent, imitate Brahmin manners and customs. Thus during marriages they wear the sacred thread and light the holy fire. They burn the dead and widows are not permitted to remarry in most of the subdivisions. Vallanádu Idaiyars are the Idaiyars who live in and about Tiruvaraṅguḷam. These are divided into a number of *Karais*, the members of a *Karai* have the same tutelary deity. They are said to be divided into eighteen sections, such as Káraikkál, Vallanádu, Kaḷḷar, Kokkikaṭṭi, Sóliya, Peṇḍukkuméikki and Aruttukkaṭṭi.

Kaḷḷar Idaiyars are said to be so called from the founder of the division being supposed not to have been born in the usual way, but to have emerged from under the ribs of his mother. The widows of the Aruttukkaṭṭi Idaiyar caste may marry again. In the Peṇḍukkuméikki caste, women inherit the property, and their husbands go and live in the house of their mothers-in-law. The Kokkikaṭṭi Idaiyans tie a *kokki* or hook to the marriage tali. There are exogamous sections within most of these divisions, named after places such as Karambakkudi, Velliakkónpatti, Mohúr in the Pattukkóttai Taluk, etc.

The Vellalars.—(16,761), The name is said to be derived from *vellam*—flood, the Veḷḷáḷars being literally "lords of the flood." "Veḷḷaḷars" therefore means men skilled in controlling water for irrigation. They are generally admitted to occupy the highest rank among the Non-Bráhmin castes. They are divided, it is said, into eighteen* endogamous sections, such as Toṇḍaimaṇḍalam Veḷḷáḷars, Kárkátta Veḷḷáḷars, Sóliya Veḷḷáḷars, Kóṅgu Veḷḷáḷars and Paṇḍárams. Toṇḍaimaṇḍalam Veḷḷáḷars, of whom there are many in the Puḍukkóṭṭai town, are vegetarians. Káráḷa Veḷḷáḷars and Sóliya Veḷḷáḷars eat flesh. Káráḷa Veḷḷáḷars are divided into Kánáṭṭárs and Konáṭṭárs each of which divisions has many exogamous subdivisions. Among Káráḷa and Sóliya Veḷḷáḷars re-marriage is not permitted and the dead are usually burnt.

There is another class of Káráḷa Veḷḷáḷars, called Siruvásalnáṭṭu Veḷḷáḷars, living at Marudúr, Álaṅguḍippaṭṭi, Kaṇṇaṅguḍi, Maṅgáttévanpaṭṭi, Naiyár, Veḷḷanúr and Kóvil Vírakkuḍi. They have no connection with the Kánáḍu Veḷḷáḷars or the Kónáḍu Veḷḷáḷars.

Mr. Hemingway states that Sóliya Veḷḷáḷars are found all over Southern India and that they are generally regarded as of doubtful descent, since persons of lower castes, who wish to be considered Veḷḷáḷars, usually claim to belong to this subdivision. The Sóliya Veḷḷáḷars are divided into several exogamous *Gótrams* or septs, such as Kádai gótram (or the quail sept),

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* It is stated in the Trichinopoly Gazetteer that there are not less than twenty endogamous subdivisions of the Veḷḷáḷars including the Káṇiáḷars, the Paṇḍárams or Gurukkals, the Nainâns, the Arumbukaṭṭis, the Siṭṭakkáṭṭu Cheṭṭis, the Chóḷavaram Cheṭṭis, the Panjukkára Cheṭṭis and the Kodikkáls. Of these, the three sections known as Cheṭṭis, Paṇḍárams and Nainâns are vegetarians. In Thurston's *Castes and Tribes*, it is stated that the Veḷḷáḷas were originally the trading class of the Tamil nation, but with the immigration of the more skilful Kómatis and other mercantile classes, the hereditary occupation of the Veḷḷáḷa Cheṭṭis gradually declined. "In ancient times they had the prerogative of weighing the persons of Kings at the *Tulabharam* ceremony (a ceremony in which the King was weighed against gold which was afterwards distributed to Brahmins)."

Koudári gótram (or partridge sept) and Gángéyan (or Ganges sept) gótram. The Sóliya Veḷḷáḷars of Ambunáḍu seem to occupy a higher rank than other Sóliya Veḷḷáḷars. They are divided into two exogamous divisions, called Ainnúrru (500) Picchars and Arunúrru (600) Nallakáṭṭars. These are said to have consisted originally of five hundred and six hundred families respectively of whom some immigrated to Ambukkóvil from Anbil near Trichinopoly with the Ambunáṭṭukkaḷḷars.

The Kongu Veḷḷáḷars seem to occupy an even lower position in society than the Sóliya Veḷḷáḷars, since they will eat with the Toṭṭiyáns and other sections of the lower Non-Bráhmin castes. Their title is Gávundan. Boys of this class are often married to their maternal uncles' daughters, who are very much older than themselves.

The Chettis.—(20,438.) The word 'Cheṭṭi' is said to be derived from *Sreshti*, the title of a Vaisyá or merchant. Various classes and castes, besides the Váṇians and the Kómaṭṭis, to be dealt with separately, append the title *Chetti* to their names, of which the following are found within the State, (1) Náṭṭukkóṭṭai Cheṭṭis, (2) Áriyúr Cheṭṭis, (3) Sundaram Cheṭṭis, (4) Vallam Cheṭṭis, (5) Vallanáḍ Cheṭṭis, (6) Váṇḍákóṭṭai Cheṭṭis, (7) Veḷḷán Cheṭṭis, (8) Kásukkára Cheṭṭis, (9) Virálúr Cheṭṭis, (10) Náráyaṇapuram Cheṭṭis, (11) Séṇiyans, and (12) Sénaittalaivans. Of these the first four have their heads clean shaved, while the rest grow a top-knot or *Kudumi* like the Bráhmins. The Veḷḷán Cheṭṭis and Kásukkára Cheṭṭis wear moustaches, while the others are prohibited from wearing them. Widow marriage is prohibited among all. Kásukkára Cheṭṭis and Séṇiyan Cheṭṭis wear the sacred thread. The males among the Náṭṭukkóṭṭai Cheṭṭis do not wear ear-rings except during marriage occasions. The other Cheṭṭis wear gold ear-rings. The Vallam Cheṭṭis and the Kásukkára Cheṭṭis wear close-fitting kaḍukkans, (ear-rings) while the Vallanáḍu and Váṇḍákóṭṭai Cheṭṭis wear big pendent rings the weight of which enlarges the lobes of the ears.

The Náṭṭukkóṭṭai Cheṭṭis, the Áriyúr Cheṭṭis and the Sundaram Cheṭṭis claim to have been voluntary exiles from Kávérippaṭṭaṇam and to be related to one another. Those that came from the East street, settled at Iḷaiyáṭṭaṅguḍi and became the Náṭṭukkóṭṭai Cheṭṭis, those that came from the West street settled at Áriyúr and became the Áriyúr Cheṭṭis and those that came from the South street settled at Sundarappaṭṭaṇam and hence are known as Sundaram Cheṭṭis. The places where they live are called *nagarams* (lit. 'cities') and the Cheṭṭis themselves are called Nagarattárs. The Kásukkára Cheṭṭis claim to have come from Conjeevaram. The Vallanáḍ Cheṭṭis seem to have been very early settlers from Vallam (or from Kávérippaṭṭaṇam) and the Vallam Cheṭṭis recent ones.

The Náttukkóttai Chettis (11,891) are divided into nine sections corresponding to nine temples. They have a ***Periathanakkáran*** for each locality, who generally settles their minor disputes in consultation with the other people of the village. Serious cases are decided in their respective temples in the presence of the trustees. Re-marriage of widows is prohibited. Immoral women and men who have had the misfortune to serve a term of imprisonment are excommunicated. Marriage settlements are always reduced to writing. These Cheṭṭis perform ceremonies for their children, which they call புதுமை (*puthumai-puthu*=new). While quite young, children have their heads formally shaved and their ears bored. When a child is seven years old, a further ceremony is performed at which twenty-seven lamps representing the twenty-seven stars are lighted on a plantain leaf, worshipped and thrown away. This ceremony takes place in the month of Kártigai (November-December) for boys and is called Kártigaippudumai, and in the asterism of Tiruvátirai in the month of Márgaḷi (December-January) for girls, when it is called Tiruvátiraippudumai. The Náṭṭukkóṭṭai Cheṭṭi boys receive their *upadésam* or initiation from their spiritual Gurus, of whom there are two, living at Pádarakkuḍi and Kilámaṭam respectively.

The women of this caste receive their initiation from their spiritual preceptor at Tulávúr. They attach great importance to omens good and bad. When they leave their villages to go and trade in distant places, they halt in a neighbouring village, sometimes for a month and more, until they see the wished-for good omen which they take to be a divine direction to start.

Áriyúr Chettis.—Áriyúr Cheṭṭis seem to be a division of the Náṭṭukkóṭṭai Cheṭṭi caste. Their spiritual preceptor lives near Arantáṅgi. There are two endogamous sections among them, the right hand section who are vegetarians and the left hand section who eat meat. Áriyúr Cheṭṭis also live near Ponnamarávati. These have a spiritual preceptor of the Páṇḍiya Náḍu outside the State for their men and a Saiva preceptor at Tirukkaḷambúr for their women. They are divided into the following seven exogamous divisions or Náḍus, called after villages in the State.

1. Ponnamarávati.
2. Sembúti.
3. Álavayal.
4. Ammaṅkuricchi.
5. Kallampaṭṭi.
6. Pudúr.
and 7. Várpet.

It is said that the Áriyúr Cheṭṭis first settled in the neighbourhood of Ponnamarávati, that their God was the God of the temple at Piránmalai, that there was a Veḷḷáḷa ruler at Váḷaramáṇikkam named Nandan, that an Áriyúr Cheṭṭi who bore the name of Máli Cheṭṭi became his minister, that a section of these Cheṭṭis thereupon settled at Váḷaramáṇikkam and that the God (Sivá) of the temple there then became their family God.

Sundaram Chettis.—Possibly these are the same as the Sundarattan Cheṭṭis mentioned by Mr. Thurston. They take their name, as already mentioned, from Sundarappattaṇam or Sundaram near Ponnamarávati, where they are said to have first settled. According to tradition, the original forefathers of the Áriyúr Cheṭṭis, the Sundaram Cheṭṭis and the Náttukkóṭṭai Chettis were brothers, of whom the ancestor of the Áriyúr

Chettis was the eldest and the ancestor of the Náttukkóṭṭai Chettis, the youngest.

Vallanád Chettis.—The women of this section are not permitted to cross to the southern side of the Vellár. There are about eight hundred families or *thalaikkattus* in this section. They probably migrated from Vallam to other places in order to carry on their profession as money lenders. There is a tradition that they belonged to Kávérippattaṇam, that they fled from there in a body and were pursued, for some unknown reason, that they sought the protection of the Kallars of Ambu Náḍu, who being unable to give them all the help that they required, called in the Vallanáḍ Kallars and with their help repelled their pursuers. To commemorate their indebtedness to them, they distributed their settlements in Kalasamaṅgalam (Pudukkóṭṭai) into nine divisions corresponding to the nine Kuppams of the Ambunáttukallars; and called themselves "generally Vallanáḍ Chettis."

There is another class of Vallanáḍ Chettis living at Kottamaṅgalam, Máṅgádu, Mannavélanpatti and elsewhere who call themselves 'Pillais' (sons) or descendants of the Vallanáḍ Chettis proper, but do not consider the god at Tiruvaraṅguḷam as their tutelary god. These will take food in the houses of the Vallanáḍ Chettis proper, but the latter refuse to eat with them.

The Vallam Chettis.—According to Mr. Thurston, these are known in the Madura District as Vallam or Tiruvappúr Chettis. It may be conjectured that they originally came from Vallam, settled for a while at Tiruvappúr, a suburb of Pudukkóṭṭai Town, and finally migrated to Madura. Like the Náttukkóṭṭai Chettis, they shave their heads clean, but unlike them they wear ear-rings. They are agriculturists and petty traders and also go to Burma and other places as accountants and agents of Nattukkóṭṭai Chettis.

The *Vándákóttai Chettis* are otherwise called Gadiakkára Chettis from *gadiyam*, a herd of pack-bullocks, the tradition

being that they used to carry on pack-bullocks the articles required for the Palace at Pudukkóṭṭai, before wheeled carts were common. Though they live near Vallanáḍu, they are in no way related to the Vallanád Chettis. They are divided into two exogamous *gotras* or septs, called Nágaparipálaka *gótra* and Siva *gótra*.

Vellan Chettis.—These are merchants who travel about buying and selling. They say that they came originally from Alliturai in the Trichinopoly District. Their present homes are Máttúr, Pudukkóttai, Kolaváippatti and Vennávalkudi.

Another section of Vellán Chettis seems to have come from Tanjore. These are subdivided into (1) the Terkattiárs, or southern men, whose God is at Nodiyúr near Vallam, and (2) Vadakkattiyárs, or northern men, whose God is at Vaidísvarankóil in the Tanjore District. A Saiva Paṇdáram near Vallam is their spiritual Guru.

Virálúr Chettis.—These are found in Virálúr, Rájáḷippaṭṭi, Rámakkavaṇdapaṭṭi and eleven other villages. They are said to have once numbered one thousand families, and one of their rules required that they should live within sight of the Virálimalai temple. But owing to a dispute one-half of them left Virálimalai and settled near Ratnagiri in the Trichinopoly District. These are now called Ratnagiri Chettis. Brides of the Virálúr Chetti class wear a cloth called ஒரிழை மந்திரக்கூறை, which will be described under Séniya Chettis. Virálúr Chettis specially venerate and worship the God Subrahmania of Virálimalai, Máriamman of Virálúr and Níliamman of Únaiyúr in the Maruṅgápuri Zemindári.

Seniyan Chettis.—These are found mostly at Séniyappatti in Kodumbálúr vattam. They are said to have come from Trichinopoly. Though not vegetarians, they will not eat mutton on account of a tradition that one of their ancesters was kept alive by sheep's milk. They are Vaishanavas, but worship Márkandéya, their family God, on the Sivarátri day in the month of *Mási*, (February—March) when they smear their

bodies with *vibhúti* or holy ashes. They wear the sacred thread and have Brahmin priests. The ஓரிழை மந்திரக்கூறை cloths, which the Virálúr Chetti brides are bound to wear at their weddings, are woven by these Séniyars. These are red cloths of somewhat peculiar texture, measuring 15 cubits by 2½ cubits and supposed to have magical powers.

Narayanapuram Chettis.—These are said to have come about seventy years ago from Náráyaṇapuram near the Palni hills and settled near Kodumbálúr. They have no connection with any other class of Chettis.

Kaśukkára Chettis.—These are found at Perungalúr, Icchiyaditthannírppandal, Pudukkóttai and Tiruvappúr. They are Saivites. They are divided into two sections, meat-eaters and vegetarians. From this class, it is said that the following four sections have branched off:—(1) the *Vadamba Chettis,* (2) the *Sóliya Chettis,* (3) the *Manchaputra Chettis* and (4) the *Mulagumari Chettis.* They wear the sacred thread like the Brahmins.

The Senaitthalaivars.—These are found at Karambakkudi, Koppanpatti and some other places.

The Kammalans (14,380).—'Kammálan' is a general name given to the five classes of craftsmen, goldsmiths, carpenters, sculptors or stone-masons, blacksmiths and coppersmiths, claiming to be descended respectively from Manu, Maya, Silpa, Thvashtra and Daivagña, sons of Visvakarma, the architect of the Gods. Hence they style themselves Visva-Brahmins. The five sections mentioned above intermarry and take food together. The Kammála women, unlike those of many other non-Brahmin castes, wear the upper portion of their cloths like Smártha women. The nattu (a kind of nose-screw) is their distinctive ornament.

The Kammálas claim to be in no way inferior to the Brahmins, and in their marriages closely follow the Brahmanical ceremonial, including *hóma* (oblations in fire). Adult

Kammálas wear the sacred thread like the Brahmins. Widows are not permitted to re-marry; but unlike the Brahmin widows, they may wear jewellery and chew betel. The Kammálas are Saivites, and their special deities are Pillaiyár, Kámátchiamman and the seven Kannimárs. Each of the five Kammála sections has an elected Náttámaikkáran and a Káriasthan to settle disputes. Over them all is Añjuvíttu Náttamaikkáran, elected by lot by the representatives of the five subdivisions. In marriages in Kammála houses, blacksmiths are given betel first, because it is explained they make tools for themselves and the other Kammálans.

Telugu Kammálas neither intermarry with Tamil Kammálas nor take food with them. Their mother tongue is Telugu and their practices resemble those of Telugu Brahmins.

The Udaiyans.—(Nattamáns 12,408) The Udaiyáns are known otherwise as Nattambádis (lit. villagers). The Nattamáns seem to be only a subdivision of the Udaiyáns, though, in the Census Reports for 1901 and 1911, they are treated as separate castes. The report for 1901 gives the number of Udaiyáns in the State as 855, and of Nattamáns as 11,160, while the report for 1911 gives the number of Nattamáns as 12,814, and does not mention the number of Udaiyáns separately. As observed in the Trichinopoly Gazetteer, the Udaiyáns and the Nattamáns seem to be identical, and with the Malaiyamáns and the Sudarmáns, are endogamous subdivisions of one and the same caste.

The Udaiyáns are divided into exogamous divisions called Kánis. They wear sacred threads at marriages and funerals. They are very industrious agriculturists. They have no regular caste pancháyats. Before arranging a marriage, the bride's party go to the bridegroom's house to dine with him, and to test his health by seeing how much he can eat. Their titles are Udaiyán, Múppan and Naynár.

Many Nattambádis are Christians.

Ahambadiyans.—(11,416) The word 'Ahambadiyan' is said to be a corruption of *Ahamudaiyán*, which means "owner of a house." According to their own traditions they are the descendants of the illegitimate sons of an early Sétupati of Ramnad. It is therefore, they say, that they are called Ahamudaiyans or "men full of pride" owing to their aristrocratic birth. The usual titles of Ahambadiyans are Servaikáran, Pillai and Tévan. They employ Brahmin *purohits* at their marriages. Among them Polygamy may be said to be rather common.

The Ahambadiyans of this State are divided into:—

(1) Añjúr (five villages) Ahambadiyans.

(2) Kóttaipparru (attached to a fort) Ahambadiyans, who are known also as Tánjúr Ahambadiyans.

(3) Rájakula (Palace) Ahambadiyans.

(4) Añjukóttai (five fortresses) Ahambadiyans.

(5) Kílasímai (the eastern country) Ahambadiyans.

(6) Kóttaikkádu (forest surrounding a fort) Ahambadiyans, etc.

The Añjúr Ahambadiyans reside in the villages of Vaittúr Muttampatty, Eraiyúr, Vattanákuruchchi and Meikkudippatti. They are said to have come from Vaittúr near Ayyampet in Tanjore district with the ancestor of the Pallavaráyan line of rulers in the Pudukkóttai State, and to have named the first village in which they settled Vaittúr, after their original home. They are said to go occasionally to Paṇdáravádai near Vaittúr to worship their tutelary God, Vírabhadran. They are divided into several exogamous septs, including Vallataraiyan, Péyvetti, Péyádi, Váttácchi, Sólagan and Kastúri. The Ahambadiyans of the five villages mentioned above and the Kaḷḷans of the six villages forming the Kulamaṅgilya Nádu assemble in the Máriamman Kóvil at Tennaṅgudi to settle disputes and discuss questions of common importance.

Kóttaipparru Ahambadiyans are divided into seven exogamous septs such as Peruchcháḷi, Malukkan, Tambirán and Kundrándan. They settled at first it is said, at Tánjúr in the

Tirumayam Taluk and afterwards spread to other villages. All disputes among them are settled by their headman living at Tánjúr. Their widows are not permitted to re-marry.

There are similar exogamous division among the other endogamous sections of the Ahambadiyans.

The Maravans.—(5,617) These are found mostly in the southern and western parts of this State. One account says that the Maravars originally lived in the Rájéndramaṅgala nádu (in modern Ramnad Zamindari) and that once when the ruler of the land wanted to marry a Marava girl contrary to custom the Maravas fled from the village and settled in what now forms Pudukkóttai State. They pierce large holes in the lobes of their ears. Polygamy is permitted and also the marriage of adult young women to mere boys. They worship, under the name of Pattavars, men of their caste who fell in battle fighting bravely.

The Maravars in general are divided into two endogamous sections, the Sétupati or Valkóttai and the Koṇdaiyan Kóttais. The Maravars of the State belong to the former section. Maravars are said to be divided also into 18 *kilais* or branches, of which we may mention (1) *Pichchar* or *Pichchai kilai*, (2) *Marakkal kilai*, (3) *Viran kilai*, (4) *Tondaiman kilai*. Most of the Maravars of this State belong to the first two branches. The eighteen divisions referred to above were no doubt originally exogamous, but the practice is that all Maravars who worship the same deity, to whatever *kilais* or branches they may belong, form an exogamous community. The Pudukkóttai Maravars are law-abiding and peaceful cultivators, unlike the Maravars of Madura, Ramnad and Tinnevelly. Their ordinary title is Tévan.

The Balijas.—(6,764)—In the Tamil districts Balijás are usually known as Vadugans (=the northern or Telugu people) and Kavarais. Many of the Balijás trace their descent from the Náyak kings of Madura and Tanjore. But this is not admitted by others, who consider them to be a mixed community

recruited from the Kápus or Reddis, the Kammás, the Vélamás and other Telugu castes. The fact seems to be that the Balijas followed the Vijayanagar armies and settled in the south when the Náyak Governors who were their leaders established themselves at Tanjore and Madura. Some of them may have been originally soldiers by profession; but they are now all agriculturists and traders. The Kápus or Reddis say that they could easily enumerate all the varieties of rice, but cannot give the names of all the sections into which their caste is split up. The Gazula Kápus or bangle-makers of Vaittúr form a subdivision of the Balijás; most of the Balijás bear the title of *Náyak*.

The Janappans or Saluppans, also Telugus, are described as hawkers and cultivators.*

The Kusavans (Potters)—(4,970). They trace their orign to Sáliváhana, the famous mythological potter-king. They are divided into three territorial sections—the Chéra Kusavans, the Chóḷa Kusavans and the Pándya Kusavans, and also into seven † endogamous nádus, such as Nárttámalai nádu, Kadavaṅgudi nádu (in the neighbourhood of Virálimalai) and Trichinopoly nádu. They imitate the customs and manners of the Brahmins, wear the sacred thread, perform *hómas*, employ Brahmin priests and condemn post-puberty marriages and re-marriage of widows. They are Saivites, and their caste title is Vélán. For purposes of arbitration in caste disputes the Kusavans are divided into four nádus, called Kánádu, Kónádu, Siruvásal nádu (see above under Kaḷḷars) and Kavinádu.‡

The Kurumbars.—(5,384). These are reputed to have been the earliest settlers in this country. They are supposed

* Another Telugu caste is that of the Jetties. They are called *Mallaka Chetties* in Tamil and are a set of professional wrestlers and gymnasts. They wear the holy thread and do not condescend to do any degrading work.

† The Solavaguppu Kusavans seem to be divided into only five exogamous sections such as Palanimangala Udaiyans, Mudikattu Udaiyans, etc.

‡ The Kusavans of the area about Viralimalai are reported to be divided, not iṇto ṇadus, but iṇto teṇ úrs (villages.)

to be the representatives of the ancient Pallavás, once so powerful in Southern India, and if so, must have gradually drifted from Toṇdamaṇdalam which they once occupied, or come to Pudukkóttai direct over the Palni hills from the Kuruba country in the Canarese land, which is supposed to have been * their original home. There is no doubt that the Kurumba language, is a corruption of Canarese †. The Kurumbars are a pastoral people who own large flocks of sheep and weave cumblis (blankets) and are found in Sellukudi, Áranippatti and Máṅgudi. They are divided into several exogamous sections called *Vaguppús* or groups of villages. Over every such group of villages there is a headman who is both priest and judge, and presides over the Vaguppú's tribal meetings. The patron deity of the Kurumbars is Víralakshmi, to whose temple at Sellukudi Inám lands were granted by the Tondaimán ruler known as Bhója Rájá. They style themselves Gávuṇdans and Ṅáyakans.

The Ambattans (Barbers) (5,052). These are divided into seven endogamous sections, namely, Vaduga Ambattans, Kalla Ambattans, etc. A Brahmin *puróhit* officiates at their marriages, and most of them discourage the re-marriage of widows. They have four endogamous nádús, each with its *periatanakkáran* (headman), who has control over a number of heads of families. The Ambattans are both Saivites or Vaishnavites. In the Vaishnavite section, those that have been branded by their Brahmin guru with the Chank (conch) and Chakra (discus) abstain from meat and drink. Saivite and Vaishnavite barbers intermarry. They may not shave Pallans or Paraiyans. Ambattans are generally known as Pariyáris (=parihári s or curers), because Ambattan women are the village midwives and Ambattan men the village surgeons.

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* Coorg, Nilgiris, Wynad and other places. There is a portion of Malabar which is now known as *Kurumbanad.*

† Another Canarese-speaking class in the State is known as the Kannadiyans. They are diligent and enterprising traders and are Lingayats,

The Vannans (Washermen) (4,309).—These occupy a low social status among the non-Brahmin castes. Among them when a girl attains puberty she is taken, as in many other castes, to a hut specially built for her at some distance from her house, where she is required to live for fifteen days. On the sixteenth day she leaves the hut and returns to the house, but has to stay for fifteen days more in a corner of the verandah. It is only on the thirty-first day that she is permitted to re-enter the house. Divorces are easily obtained in this caste as in several others, and divorced persons are permitted to re-marry.

For the lower classes of Súdras there are separate washermen, called *Podara Vannán.*

The Andis.—This name is applied generally to a class of non-Brahmin beggars recruited from all classes of Súdras. But all Ándis are not beggars; for example, Púkkára Ándis make garlands of flowers, and Úr Ándis are Ándis settled in villages as agriculturists or accountants. The Ándis that beg are called *Kóvanándis*, as they are supposed to possess nothing except the loin-cloths (கோவணம்) that they wear. The Lingadhári Ándis will be described later under Pandárams.

The Muttiriyans.—(8,001) These are otherwise known as Ambalakárans. As has been observed by Mr. Thurston, there seems to be some connection between Ambalakárans, Muttiriyans, Urális, Védans, Valaiyans and Vettuvans. But its exact nature remains to be ascertained. They observe the same customs and manners as the Ahambadiyans. The names *Ambalakáran* and *Mutracha* or *Mutarasan* may indicate that they once enjoyed a higher status than they do now. There is no evidence, however, to connect them with the Muttiriyan noblemen of whom we find mention in inscriptions of the Pallava period. The special god of Muttiriyans is said to be Karuppannaswámi of the Kollimalai hills in the Salem district. Their usual titles are *Muttiriyan, Ambalakáran, Servaikáran* and *Kávalkáran.*

The Pandarams.*—The name *Pandáram* is used both as the name of a caste and as that of a class of mendicants recruited from the Saivite Súdras, who profess extreme piety and wander about begging.

The Pandárams proper are usually landholders and priests of many non-Brahmin classes. Mr. Francis, in the Census Report of 1901, says that the Pandárams are really superior to the Ándis since they are usually Vellálas by caste, while the Ándis are recruited from all classes of Súdras. Lingadhári Pandárams, amongst whom those that speak Telugu are known as Jangam Ándis, wear the figure of the lingam suspended from the neck in a metal box. But these Lingáyat Pandárams difler in many respects from the Lingayats proper.

The Shanans (Toddy drawers).—(2,439). † They have hitherto been held to occupy a low position among the non-Brahmins, though they claim to be Kshatriyas and trace their descent from the Pándya kings. They call Bhadrakali their mother or foster-mother, and say that she taught them their usual occupation of toddy-drawing.

The Uppiliyans.—(1,452). These derive their name from their traditional occupation, the manufacture of salt and salt-petre. They are said to be also called *Karpúrachettis* from selling camphor as well as saltpetre. They are considered superior only to the Valaiyans, the Úrális and the Pallis. Their usual title is Náyakan. The manufacture of earth-salt ceased on the passing of the Pudukkóttai *Earth-salt suppression Regulation* in 1888; and they are now engaged in cooly-work especially earth-work. It is said that an Uppiliyan has to remain unshaved all his life if he cannot get a virgin for his wife.

The Kuravans.—(1,562). They are divided into five endogamous sections, namely, 1. The *Uppukkuravans*, who

* In the census of 1931, Andis, Dásaries, and Pandárams have been grouped together. Their number is 5,487.

† Many Shanans now prefer to be called Nadars,

once made salt (uppu) but are now petty traders in cattle, dried fruit, etc. Basket-weaving and the rearing of pigs, are prohibited among them on pain of ex-communication.

2. The basket-weaving Kuravans. It is supposed that these were the original Kuravans, and that the other sections of the Kuravans were later recruits to the caste. They will eat almost anything including cats.

3. The *Narikkuravans* are Kuravans who eat jackals as their name implies (Nari=jackal). They sell needles.

4. The *Panrikkuravans* breed and sell pigs (panri) and are employed as scavengers.

5. The *Dombas* are acrobats. All of these, except the Panrikkuravans are nomadic. The vernacular of the Kuravans is Telugu.

The Chakkiliyans (Cobblers).—(1,024). These are divided into four endogamous sections named Reddi Chakkiliyans, Anupa Chakkiliyans, Mora Chakkiliyans and Toṭṭiya Chakkiliyans. Of these, the vernacular of the first three seems to be Telugu, and that of the last class Tamil. They are of very low social status. The Paraiyans and the Pallans take food with them. The ordinary washerman will not wash for them. Their clothes are washed by a special class of Vannans known as *Podara* washerman. Their marriages are arranged for them by their Náttánmaikkárar (headmen).

The Patnulkarans.— * (1,210). These are silk-weavers said to have come from Souráshtra or Gujarat. The Kaikólans and the Sáliyans were the indigenous Tamil weavers. Ottakkúttar, the well-known poet, is said to have been a Kaikólan. The Náyak rulers of Madura are said to have imported the Patnúlkárans from the north, being dissatisfied with the cloth woven by the Tamil weavers. The Patnúlkárans of the State are found chiefly at Tiruvappúr, a suburb of the town of Pudukkóttai. They are noted for their skill. Their usual title is *Chetti*. They do not generally claim, like their fellow

* Sourashtras.

caste-men in some other places, to be styled Sourashtra Brahmins, or like them take the Brahmin titles of *Aiyar*, *Aiyangar* and *Bhágavatar*. The Patnúlkárans are mostly Vaishnavites and speak *Patnuli*, a dialect of Gujaráti.

The Razus.—(1,644) The Madras Census Report for 1901 says of them.—"The Rázus are, perhaps, descendants of the military section of the Kapu, Kamma and Vélama castes that followed the Vijayanagar Governors. At their weddings, the Rázus worship a sword, which is a ceremony that usually denotes a soldier caste....But they eat fowls which a strict Kshatriya would not do, and their claims are not usually admitted by other Hindus. They have three endogamous subdivisions, Murikinadu, Nandimandalam and Suryavamsam of which the first two are territorial." They wear the sacred thread, and their marriage and other customs are like those of Brahmins. The women of well-to-do Rázu families observe *gosha*.

Kandy Rajas.—These are the descendants of the relatives of the last King of Kandy, who were sent to Pudukkottai as State prisoners in 1816, after the deposition of the king in 1815. The last King of Kandy was closely related to the Náyaks of Karukappúlámpatti in the Tirumayam Taluk, and all Náyaks related to him are called generally Kandy Rájás. The Kandy Rájás are found in Púlámpatti, Vellaikkurichchi, the town of Pudukkóttai and some other places. The women of this caste wear toe-rings of gold which are considered an emblem of noble birth. The caste is divided into a number of exogamous sections. Widow-marriage is not permitted, and unchaste women are expelled from the caste.

Lala Kshatriyas.—The Lálas call themselves Kshatriyas and claim to be descended from some Rajputs of Jaipúr, who halted in the State when on a pilgrimage to Rāméswaram, and were persuaded to remain here to assist the ruler of the State in extending his dominion and consolidating his conquests. They seem to have helped the Rájá in his wars with the Páláyakár of Marungápuri, and to have been granted service-tenure

lands near the western border. Formerly whenever the Rájá went out, they used to escort him on horseback, and, at Darbars, they sat on his right in their military uniform. Their manners and customs resemble those of the Brahmins.

The Oddas.—(1,172). These are a Telugu people who are supposed to have come south in the time of the Náyak kings of Madura and Tanjore and are now employed as scavengers and on earthwork such as digging or repairing tank and channels. They are a hard-working class.

The Pallis.—In the Trichinopoly Gazetteer it is stated that, since the word *Palli* is also used to denote a Palla woman, the Pallis prefer to call themselves Vannians (or Kshatriyans of the *Vahni* or fire-race) and that they claim to be superior to the Bráhmins and have taken to wearing a sacred thread on all occasions. The Pallis seem however to be a low agricultural caste, while the Vanniyans are connected with the Visánginátttu Kallars with whom they intermarry. One section of the Vanniyans are called Pandárattár Vanniyans and another Kóttayapuram Vanniyans.

The Tottiyans.—These are mostly found in the neighbourhood of Virálimalai. Some Zamindárs of the Madura District belong to this caste. Toṭṭiyans speak Telugu and no doubt came in the wake of the Vijayanagar armies to Madura. They are divided into nine endogamous divisions. To settle their caste-disputes they have a *Periyatanakáran* or headman who conducts inquiries sitting on a blanket or *kambli,* hence perhaps the Toṭṭiyans are called *Kambalattáns.* Their spiritual preceptor lives at Conjeevaram; and many caste disputes are referred to him during his tours for decision. Toṭṭiyans use the title *Náyakan* and their village headman *Ur Náyakan.* The Toṭṭians do not admit the superiority of the Brahmins and do not worship the usual Hindu gods. Their caste deities are Jakkamma and Bommakka, supposed to be the spirits of two of their women who committed sati long ago. Many of the Toṭṭiyans are believed to be adepts in the black art, and able to control evil

spirits. Among the Toṭṭiyans young boys are married to grown-up women.*

There is a section of the Toṭṭiyans known as *Káttu* (jungle) *Tottiyans* with whom the other Toṭṭiyans have no connection. These are said to have contracted an alliance with a Muhammadan family and to have been served with beef by them. Thereupon, they fled into the jungles—hence their name.

The Vallambans.—The Vallambans are found in this Presidency mostly in the Madura district and the Pudukkóttai State. They call themselves *Vallam tótta Vellálas* or the Veḷḷáḷáṣ who were driven out of Vallam, a village near Tanjore. They are found in the south-east portion of the State, and are divided into two † territorial subdivisions, namely, Pálaiyanádu Vallambans and Kílnádu or Kílanilai nadu Vallambans. The Vallambans are themselves devil-worshippers and call festivals in the temples of Siva and Vishnu *peyáttam* (or devils' dances.)

The Uralis.—(9,378). The Úrális are practically confined to the Trichinopoly and Madura districts and Pudukkóttai State. They claim to be Kshatriyas who originally migrated from Ayódhya (Oudh). The story is that the forefathers of the Úrális had illicit intimacy with servant girls, quarrelled on this account with their wives and other relatives, came to South India bringing their mistresses in seven palanquins, and married these mistresses and thus became the progenitors of the seven endogamous sections of the Úráli people dwelling in seven areas, namely (1) Vadaséri Nádu, (Ratnagiri in the Trichinopoly district); (2) Pillúr Nádu; (3) Malaiyamán Nádu called Sengudi Nádu in the Trichinopoly Gazetteer; (4) Kaduvankudi Nádu

* "A parallel is to be found in Russia where, not very long ago, grown up women were to be seen carrying about boys of six to whom they were betrothed"—Quoted by Mr. Thurston from "*Marriage Customs in Many Lands.*"

† In the Trichinopoly Gazetteer it is stated that there are three other subdivisions, namely the Mél nádu (or Jayankonda nadu), Chengi nadu and Amaravati nadu.

(Virálimalai); (5) Talaikka Nádu (Únaiyur in the Maruṅgápuri Zamindári); (6) Paluvanji Nádu and (7) Maruṅgai Nádu, (Marungápuri). The first three of these are called Vadaséri Úrális and the last four Náttuseemai Úrális. The word *Uráli* means territorial lord, and they call themselves *Muttu Rájás* disputing the right of the Ambalakárans to this title. Their ordinary title is Gavundan. They claim to be superior to other non-Bráhmin castes, and it is said that they will take food with members of no other caste but will accept food from the Vellálás, but will not eat it along with them.

The Karumburattans.—(6,629). The Karumburattans are found only in the Madura district and the Pudukkóttai State. They rank fairly high among Súdrás for they will not take food, for example, with the Valaiyans, Kammálans, Úrális, or Mélagars. They are divided into five endogamous sections, corresponding to the following districts:—

Vadasêripaṭṭi Nádu, near the Pudukkôttai town,
Kiliyúr Nádu, in Kolattúr taluk,
Perunkudippaṭṭi Nádu in Kolattúr taluk,
Nilayappaṭṭi Nádu, in Tirumayam taluk and
Pálaiyur Nádu in Alangudi taluk.

They are found mainly in the southern parts of the Tirumayam taluk and are employed in various capacities by the Náttukkóttai Chettis.

The Melakarans.—(3,060) These have a high opinion of their own social status, claiming to be Kallans, Ahambadiyans and so on, and stating that their profession is merely an accident. They are divided into two classes, (1) the pipers proper and others forming the periyamélam (band composed of clarionet or nágasaram, pipe, drum, and cymbals) and (2) the Nattuvans to whose nautch—music, (the chinnamélam), the Déva Dásis dance. The Dásis, the women of the Mélakárar caste, are professional dáncing girls. The rules of the caste require that married women should not wear bodices or petticoats or wear Kammals (ear-rings set with gems).

The Sattans.—The correct name of this caste is said to be Sáttádavar*. They are non-Brahmin Vaishnavás who do not wear the holy thread like the Brahmin Vaishnavás. Their ordinary titles are Aiyar and Álwar. Most of the Sáttáns of the State are attached to the Vishnu temple at Tirumayam. They perform such minor offices in the temple as making garlands of flowers for the gods and lighting and feeding the sacred lamps. They follow the customs and practices of the Tenkalai Vaishnavás.

The Tadans (Dasaris).—They are Vaishnava beggars whose vernacular is Telugu. The words† *Tádan* and *Dásari* literally mean servants or slaves; and the story goes that a rich Chetti, who had been for a long time childless, made a vow that, if he should have a son, he would devote him to the service of his God Vishnu, that he was subsequently blessed with many sons and that he dedicated one of them to the God. These beggars carry conch-shells which they blow to attract attention and gongs which they strike as they go on their rounds.

The Occhans.—These are found mostly in the western parts of the Tirumayam taluk. They were, formerly temple musicians. But they are at present pújáris in Pidári and other Amman temples. Their insignia are the Udukkai or hour-glass-shaped drum, and the silambu, or hollow brass ring filled with bits of brass, which rattle when it is shaken. The renowned Tamil epic poet Kamban is traditionally believed to have belonged to the Ócchan caste. In their puberty, marriage and death ceremonies, the Ócchans closely follow the Pallis or Vanniyans.

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* *Sátáni* is the shortened from of *Sáttadavan*, the uncovered man. "They are prohibited from covering three different parts of their bodies, viz, the head with the usual tuft of hair, the body with the sacred thread, and the waist with the customary strip of cloth" (Mr. C. Hayavadana Rao quoted by Thurston). They behave like the Vaishnava Brahmins. Thurston calls them *Sátánis*.

†*Dásan* and *Tádan* (which is the Tamil form of *Dásan*), have the sense of servant or slave.

The Occhans have their caste organisation, and in all places where they live, they are under the control of the head man (Periyathanakaran).

The Ilamagans.—(634) These are a caste of cultivators. They are confined to the districts of Madura and Trichinopoly and to the Pudukkóttai State. Many Ilamagan women have boy husbands, who have a number of children fathered upon them while they are still young.

The Senaikkudaiyans.—These are domestic servants and petty traders and cultivators. Their usual title is *Pillai.* They seem to be different from the Senaikkudaiyáns of British India who are described by Mr. Thurston as Ilai Vániyans or betel-vine cultivators.

The Vaniyans.—(1,535). These extract oil from gingelly, ground-nut and other seeds. They are divided into two classes, *Orrai Chekkáns* or Vánians using single bullocks, and *Irattai Chekkáns* or Vánians using two bullocks to work their mills. They are said to be divided into 1,001 exogamous septs. Their usual title is *Chetty.* They follow the customs of the Brahmins.

The Sembadavans.—The Sembadavans make nets and fish in tanks. *Sembadavan* is derived from *Sem*=good and *badavan*=boatman. They sometimes call themselves *Guha Vellálas,* (after *Guha,* the boatman who rowed Rama, Lakshmana and Sita across the Ganges on their way to the Southern forest).

The Pillaiperans.—These are not recognised as a separate caste by Mr. Thurston, or in any of the Census Reports. They are a caste like the Vallambars to whom they claim to be superior. They are vegetarians, while the Vallambans are meat-eaters, and they therefore will not take food with the Vallambans. It is said that there are about fifty families of this caste in the State. They say that they came to the State more than a century ago from Mallai (or Mahábalipuram) by way of Mailai (Mailápúr), Conjeevaram and Arantángi.

CHAPTER IV.

AGRICULTURE.

Introductory:—Agriculture forms not only the chief industry in the State, but also the mainstay of a large number of its inhabitants. Out of a total population of 4,00,694 the number of earners and working dependents, as returned in the Census of 1931, was 258,435 of whom 131,433 followed agriculture or pasture as their occupation. The following table shows the extent of lands of every description in the State in Fasli 1344 (1934—35).

		Acres.
Total area of the State		7,54,291
Deduct.—	Acres.	
Game preserves...	32,239	
Porambokes and unclassified lands ...	2,11,796	
Assessed wastes	41,707	
		2,85,742
Occupied lands.—		
Inam	1,37,570	
Ayan	3,30,979	
		4,68,549

The area under cultivation in Fasli 1344, was 4,58,578 acres; 3,28,974 acres were held under ryotwari tenure, and 1,27,598 acres under inam tenure, while 2,006 acres were assessed or unassessed lands occupied without patta. All the Porambokes and assessed wastes to the extent of 2,53,503 acres were open to the free grazing of cattle.

Alangudi, by virtue of its fine loamy soil, is better suited for agriculture than Tirumayam or Kolattur where the soil is largely rocky or gravelly and irrigation is less adequate.

Classification of lands:—Besides the two classes of agricultural lands, wet and dry, there is a third class called *achukattu lands* which though not recognised at the Revenue Settlement is considered by the ryots as a separate class,

The *achukattu lands* are the same as the *manavari* or rain-fed lands of the Madras Presidency. Before the Revenue Settlement of 1910, only those lands that had a recognised source of irrigation, such as a tank or channel were classed under wet. The *achukattu* lands, having no such source of irrigation, were some of them fit for wet cultivation owing to water percolating from tanks or other fields on a higher level or to the rain water being retained in the fields by the high banks. The former class of *achukattu* were settled in 1910 as inferior wet lands, and the latter as dry. There were before 1910, 11,875 acres of *achukattu lands* of which 9,834 acres were classified as inferior wet lands and 2,041 as dry lands. Good wet lands are found in the ayacuts of the best tanks, and the best dry around Karambakkudi and Virálimalai. But even the best of the wet fields must be considered inferior to those in the Cauvery delta, owing to the absence of perennial streams and of the alluvial silt that they deposit.

Soils:—The main types of soils found in the State are the red (*Sevval*) and the black (*Karisal*) soils. The former preponderate largely over the latter. These soils are sub-divided and named in different ways in different parts of the State. There is a rich chocolate loam called *padugai* in the ayacuts of Kavinad, Vallanad and other large tanks enriched by tank-silt and green manure but decidedly inferior to the silt-fertilised alluvium of the Cauvery delta. *Karisal* is black loam; its value is considerably lowered when it is mixed with clay. The red variety of soil is met with everywhere and is called *sevval* when loamy, *manal* when sandy, and *saral* when gravelly. In parts of Tirumayam and Kolattur Taluks, a saline soil known as *Kalar* occurs which is ill-suited to cultivation. This salinity or alkalinity is due to the presence of the soluble carbonates of Sodium and Potassium which can be removed as follows:—(1) by growing green manure crops such as sunn-hemp or *daincha* and ploughing them in, (2) by applying silt and ploughing it in, (3) by growing crops such as Ragi and Tobacco which thrive

well on such soil and in course of time remove the injurious salts, and (4) lastly by improving the drainage of the fields. These soils are, however, rarely cultivated.

Cultivation:—The methods of agriculture practised in the State generally resemble those obtaining in the adjoining districts—subject no doubt to minor variations depending on local conditions. As elsewhere, there are three sorts of cultivation, viz., wet, dry and garden. The principal crops under each head are—

Wet.	Dry.	Garden
Paddy.	Varagu.	Maize.
Plantains.	Ragi	Chillies.
Sugarcane.	Cholam.	Flower-plants.
Yams and Turmeric.	Cumbu.	Tobacco.
Betel vines.	Groundnut.	Tomatoes.
Ragi.	Grams.	Radish and other root crops.
	Gingelly.	Vegetables.
	Cotton.	Plantains.
		Fruit trees.

In the summer, cucumber, gourds, ragi, plantains and gingelly are grown on wet lands.

The principal wet crop is paddy, and the principal dry crops *Varagu*, Ground-nut and *Ragi*. The *Kódai vellamai*, or summer cultivation, commences in *Masi* (February–March) and ends in *Adi* (July–August). The *Kála vellámai*, which is more extensive, begins under normal conditions in *Adi*, and extends over four to six months. When conditions are unfavourable, wet lands are sometimes used for dry crops, or paddy is raised with well-water alone; or again two short-term varieties of paddy are grown instead of one long-term variety; or *Kálam* cultivation is begun late, and extended into *Kódai*; or, if the worst comes to the worst, the *Kódai* operations are abandoned altogether.

Broadcast sowing:—Paddy is sometimes sown broadcast and sometimes raised in seed beds and subsequently transplanted.

The former method is adopted if water is scarce, the latter if it is plentiful. Superior paddy is, with rare exceptions, always transplanted, but inferior varieties are sown broadcast, especially the hardier varieties known as *Kuruvai* (A. D. T. 3) which are able to resist drought.

Double-crops:—Double-crop cultivation which presupposes an excellent soil and an unfailing supply of water is the exception rather than the rule in the State, and is only found to any extent under the larger tanks such as Kavinád, Vallanád and Neerpaḷani. Only 20 per cent of the lands under first and second class irrigation sources, and 7½ per cent under third class sources are officially stated to be under a double-crop in normal years.

Paddy:—The superior varieties of paddy are *Garudam samba*, *Nellore samba*, (A. D. T. 5) *Kichili samba* (G. E. B. 24) *Sadai samba* (Co. 6) *Pattanam samba*, *Karthigai samba*, *Thotta samba*, *Vellai samba*, *Pallaya samba*, *Kaivirai samba*, *Serumanian* and the A. D. T. 2 variety. Inferior varieties are *Kuliadichan*, *Arian*, *Sarappili*, *Poonkar*, *Aruvathankuruvai*, *Kuruvai* (A. D. T. 3) and *Karunkuruvai*.

Kichili samba (G. E. B. 24) is becoming very popular with the ryots. It has slender stems which are strong and not liable to be laid flat by rain and wind. It is hardy and resists drought and pests. Under ordinary conditions it yields 42 Kalams per acre and is of 4½ months duration. *Nellore samba* (A. E. B. 65) is shorter in duration than the local variety by about 15 days and its rice is also superior to the local variety.

The short duration or *Kuruvai* paddy (A. D. T. 3) is in external appearance like the *Nellore samba* and matures in 90 days. The rice is white.

The varieties recently introduced or tried are Co. 1 to 9 and A. D. T. 5 and 8; the strains Co. 1 to 9 are resistant to the *piricularia* disease.

The *sambás* are long duration paddies, maturing in from five to seven months and requiring constant irrigation. The *kars*, or short-duration varieties, mature in from two to four months. The grain of the former, being less coarse, and easier of digestion is consumed by the upper classes, while the latter which are cheaper are eaten by the poor. The names of the grains in several cases describe their shape, size, etc. Thus *Garudan samba* has red and white streaks, like those on the body of *Garudan* or the kite. *Sirumanian* (*Siru*=small, *mani*=grain) is small and round. *Aruvathán kuruvai* matures in 60 days (*Aruvathu*=60). Among the *kars*, *arián* deserves special mention. It can stand any amount of water; its seedlings thrive even when completely submerged.

How Produced:—The *kála* cultivation of paddy begins in July or August, or as soon as the South-west monsoon current has brought sufficient rain.

The first stage in the operations is the preparation of the *náthangál* or nursery. It is either *puluthi kál* or *tholi kál*, dry or wet. *Puluthi kál* is prepared by ploughing the nursery dry so as to reduce the soil to fine dust (*puluthi*). It is resorted to for *samba* crops, the cultivation of which has to be begun very early, before the regular rains have set in. Dry nurseries do not require much watering. Their seedlings resist drought so well that they may safely be left in their beds for a couple of months should transplantation be delayed by lack of rain. Ordinarily, the seedlings are fit for removal after a month or so.

The *tholi* or wet *náthangál* which corresponds to the séru *náthangál* of the Delta, is prepared by ploughing and reploughing the selected plot at short intervals, while it is submerged under a couple of inches of water. It is manured by ploughing green leaves into it, until the bed becomes a soft pulpy mass. It is then levelled by drawing a wooden board measuring about 8 ft. by 2 over it. This operation which is known as *parambadithal* is performed by yoking a pair of oxen

to the board and driving them over the nursery. The driver stands on the board applying his weight so as to level the surface of the nursery. Wet nurseries require plentiful rain or well filled tanks.

The seed sown in the nursery is either ***varal virai*** (dry seed) or *sâravacha* ***virai*** (soaked seed). The soaked seed is allowed to stand in water for about twenty-four hours, covered with straw and gunny rags and then strained through wicker baskets. This process brings about the partial germination of the seeds, the tiny sprouts which make their appearance being known to the ryot as *kombu* or *paruvam* or *mulai.* Seed is soaked when rain is late and there is no time to be lost. Seedlings thus prepared, though ready for transplantation in about three to four weeks, are not able to resist drought or excessive submersion.

Seed is sown thick in the nursery, at the rate of 40 to 50 Madras measures a nadugai ($16\frac{3}{4}$ cents or about $\frac{1}{6}$ acre). One nadugai yields sufficient seedlings to plant an acre. When dry seed is used, the bed is kept well submerged; if soaked seed is used it is drained; otherwise the seed will rot. A simple contrivance employed locally to drain the nursery is the *seendi* which consists of a bundle of straw or palmyra leaves, drawn across the nursery, so as to cut furrows to allow the water that has stagnated in pools and puddles to escape.

Generally, seedlings remain in the nursery for a fourth of the time that they take to mature. *Kuruvai* seedlings are thus ready for transplantation after three or four weeks, and *samba* after a month and a half.

Rain immediately after sowing is not beneficial and is therefore called *pagai malai* or hostile rain. A clever device sometimes adopted is to keep the seedlings submerged, so that the rain may not beat on them and dislodge the rootlets that have not had time to establish themselves in the soil.

By the time that the seedlings are ready there should, in a favourable year, have been sufficient rain to give the tanks a good supply of water. The *seycáls* or fields to be planted are ploughed and manured, and the seedlings, pulled up from the nursery and tied into bundles called '*mudis*,' are transplanted in bunches. The fields are hand-weeded two or three times and well irrigated, the depth of water being increased with the height of the crop. Harvest begins usually in Thai–Mási (January-March). The crops are cut close to the ground, bundled up into *Aris* (sheaves) and *kodungais* (bundles which can be conveniently grasped between the arms), and carried to the *kalam* or threshing floor, where they are threshed, first by beating them on the floor, and secondly, by driving cattle round and round over them. *Tháladi* or hand-threshing yields the best paddy by far, *Póradi* or cattle-treading yields a poor quantity of grain, with a large admixture of chaff. It is out of the first threshing that the ryot reserves his seed for the next season.

The ryots of the State, like their neighbours in the adjoining districts, follow the time-honoured ways of cultivation, and very often use a high seed rate of 36-45 Madras measures per *nadugai* of seedbed. The State Agricultural Department has been endeavouring to show them the advantages of using a low seed-rate, and of economic transplantation of seedlings coupled with the ploughing-in of green manure crops such as daincha (*Sesbania aculeata*), sunn-hemp (*Crotalaria juncea*) and *kolinji* (*Tephrosia purpurea*) and red-gram (*Cajanus indicus*). The department is also advocating the use of light iron ploughs and the application of artificial manures, such as superphosphate and sulphate of ammonia, in conjunction with bulky organic manures for quick and heavy yields.

Dry crops.—Dry cultivation, especially as carried on extensively and intelligently in the Álanguḍi Taluk, affords interesting examples of rotation and mixed-cropping. *Cumbu* and *Varagu* are grown in alternate years, since they exhaust

the soil. *Cumbu* is also grown along with *Thuvarai* (*dholl*) or red-gram. *Cumbu* is cut after three months and *Thuvarai* after six. *Cumbu*, ground-nut and oil-seeds are also sown together, and since the first two mature in three and six months respectively and the last take longer to ripen, they are harvested in succession. A useful practice is to sow *Varagu* and red-gram in the same field. Since *Varagu* requires more water than gram, a season of plentiful rain gives a good *Varagu* harvest, while scarcity of rain does not prevent a good harvest of gram.

Varagu: (*Paspalum scorbiculatam*) *Varagu* is the most important and extensively grown of the dry crops. It is a six months crop, usually sown with red-gram. Its grain forms the main food of the agricultural classes. A shorter variety called *vayal varagu*, of about four months duration, is slowly spreading as a summer crop in wet lands.

Gram.—Horse-gram, which is largely cultivated in the Kolattur Taluk, is sown in October and harvested in January. Red-gram is grown along with *Cumbu* or *Varagu*. Green and black-grams are more sparsely cultivated. In the Alangudi Taluk, red-gram is frequently grown as a green-manure.

Cholam and Maize.—*Cholam* is occasionally grown with *mochai* (*Dolichos lab-lab*); Maize (*Zea mays*) is usually grown as a summer crop in wet lands, or as a garden crop under wells practically throughout the year.

Ragi.—(*Eleusine coracana*): *Ragi* is raised on dry and also on garden lands. One of its varieties known as *Vilakeppai* (furrow *ragi*) deserves mention. It is the only dry crop in the State that is transplanted. The *seicál* or transplanting field is ploughed at the setting-in of the south-west monsoon, and as a furrow is cut by the plough, the *ragi* seedlings which have remained in the nursery for about twenty days are dibbled singly along it at intervals of a foot or ten inches. As the next furrow is formed, the soil overturned by the plough falls on the seedlings in the first furrow and covers their roots. A new

strain known as E. C. 593 evolved by the Millet specialists of the Madras Agricultural Department has been tried successfully in the State Farm as a summer crop.

Cumbu, etc.—*Cumbu* (*Pennisetum typhoideum*) is grown with gram. *Samai* (*Panicum miliare*) and *Tenai* (*Setaria italica*) are sown on poor lands in small quantities. The African ***Bajri*** or Navnagar ***cumbu*** is being tried.

Oil seeds.—The Ground, Earth or Pea-nut (*Arachis hypogaea*) forms an important crop under this group; and it was grown on 35,400 acres in the State in 1934-35. It suits sandy soils and *Padugai* land, that is alluvial land consisting of a mixture of fine sand and silt, is equally good. It is cultivated as a dry crop from June-July to December-January.

Cultivation Details.—**Ground-nut (*Arachis hypogea*)** The ryots are unanimously of opinion that ground-nut is a crop that exhausts the soil and cannot be cultivated on the same land for a series of years without the liberal use of manure. Land cropped with it year after year they consider, is apt to get foul. In the report of the Royal Commission on Agriculture in India (1928) however, it is suggested that the leaves of ground-nut could be used as green manure without interfering with the commercial value of the crop and that this "would furnish an additional reason for extending the area of this valuable crop." (paragraph 86). So far as unirrigated land is concerned, there are hardly any cereal crops but ***varagu*** (*Paspalum scorbiculatum*) and ***Tenai*** (*Setaria italica*) with which ground-nut can be cultivated conveniently, and it is sown either mixed or in rotation with *tenai* or *varagu*. ***Tenai*** is considered a much more exhausting crop than ***varagu***, and hence ground-nut is not sown after it unless manure is liberally applied. The ryots prefer to alternate the crop with either ***Cumbu*** (*Pennisetum typhoideum*), or the spiked Millet or ***ragi*** (*Eleusine coracana*) instead of with ***varagu*** in a rotation, but the ***cumbu*** harvest comes off so early as to leave the land bare for a considerable

portion of the year and yet so late that a ground-nut crop sown afterwards is apt to suffer for want of rain. Ground-nut following a *Cholam* crop is said to be predisposed to the attacks of *ver puchi* (*Sphenoptera* sp.). On irrigated dry lands ground-nut grows best if sown after *cumbu* or *ragi* has been harvested.

A liberal application of tank or channel silt, ashes and other manure is a conspicuous feature in ground-nut cultivation. Lime is also regarded as essential for ground-nut.

Varieties.—Several varieties of ground-nut are now grown but the commonest and most important is termed "Mauritius" The varieties are classified according to the habit of the plant and size of the nut, (pods). Some have an erect habit, some have spreading branches which lie flat on the ground; some have large pods, while others have small ones; others bear fruit early and produce nuts centred round about the tap root in clusters. Ground-nut was once a very paying crop and between the years 1920 and 1930 the trade in ground-nut constituted 72 to 74 per cent of the total export trade in oil-seeds by sea and rail from the Madras Presidency including the Pudukkottai State. The area under this important crop in the State has decreased from 45,900 acres in 1924–25 to 15,400 acres in 1934–35 no doubt owing to the fall in price. The Agricultural Department have very recently introduced the drought-resisting "*saloum*" variety.

Gingelly.—(*Sesamum indicum*) is grown in the State on a very small scale and on the dry poor soils. It is sometimes sown on paddy fields as a second crop. It contains 40 per cent by weight of oil.

The area under *plantains* and *sugar-cane* is now increasing These crops pay the ryots better than paddy.

Sugar-cane.—Sugar-cane (*Saccharum officinarum*) is now grown in Satyamangalam, Mélur, Pasumalaipatti, Kalamávúr, Sittannavásal, Thalampatti, Kulipirai, Edayáthur, Álavayal, Koppanápatti, Kannangudi and Puliyúr. The chewing varieties called *Namam* and *Bonthan* or *Rasathali* are largely raised

in these villages. The ryots of Kannangudi and Puliyúr grow the reed variety and manufacture jaggery therefrom.

Plantains.—(*Musa paradisiaca*) These are cultivated in Kudumiamalai, Viralur, Vellanur, Puthambur, Sembattur, Sathiamangalam, Melur, Pillamangalam and Karaiyur. In addition to the dwarf variety (Mauritius), the big varieties, called *Monthan* and *Rasthali* are largely grown for sale in the capital town and in the Chettinad.

Tobacco.—(*Nicotiana tabacum*). The cultivation of this crop has become very intensive in Arimalam, Sevalur, Kulipirai, Rangiyam and Puthambur. The cured stuff finds a ready market locally. The variety grown is only fit for chewing. There appears to be considerable scope for the extension of the area under tobacco, large quantities of which are imported into the State. The matter is engaging the attention of the Government. The crop has recently been introduced in Poovarasakudi.

Tomato.—(*Lycopersicum esculentum*) is a new garden crop much valued for its vitamin-contents and grown in Kodumbálur, Virálur, Kothakóttai, Edayápatti, Koilpatti, Pallathividuthi and in town gardens. The variety "Ponderosa" is found to be the best. The local demand for the fruit is steadily increasing.

Tapioca.—(*Manihot utilissima*) *Maravelli kilangu*, comprises the sweet and early varieties. The red and the white varieties were successfully tried in the State Farm and then introduced in the villages of Annavasal, Álangudi, Keelappatti—Rasiamangalam, Kottaikadu, Vayalogam, Selliyampatti and Mullankuruchi and are becoming very popular since the ryots find in them a good and nourishing food.

Betel vine.—(*Piper betel*) is confined to a few villages such as, Sembáttur, Annavásal and Perunchenai, and is cultivated by Muhammedans (Ravuttars) Indian Christians or Pallans. There are two varieties, the "white-leaved" and the "dark green-leaved." The latter is of an inferior quality and is largely used.

The betel vine is trained on standards of *Agatti* (*Sesbania grandiflora*). Vegetables such as brinjals, chillies and drum-sticks are usually grown in the betel-gardens and bring in a small additional income to the cultivators. The drum-stick stems are useful as supports to the betel vines.

Groves and plantations.—There are no extensive gardens of fruit trees in the State. There are however small plantations, here and there, especially along the river-courses, of cocoanut (*Cocos nucifera*) and palmyra (*Borassus flabellifer*) palms. Small topes (gardens) are found in Kadayakkudi, Málaiyídu, Tiruk-kalambur, Ponnamaravati, Valayapatti, Yenádi, Karaiyur, Idayathur, Nerunjikkudi and Tiruvidaiyappatti. The State Agricultural Department has successfully introduced the Travancore variety of cocoanuts in the villages of Regunadha-puram, Tirumayam and Virachilai. They yield large nuts which are much appreciated by the ryots. The various industries for which the cocoanut and palmyra afford materials have been little developed in the State. The Government hope to encourage the manufacture of palmyra jaggery (coarse sugar).

Mango. (*Mangifera indica*) orchards are not uncommon. Good grafted varieties of mangoes have been successfully introduced in the villages of Karambakkudi, Manathichithy, and in Kadavampatti, in the Ananda Bagh, and in the Kokumari and Sivagnanapuram topes. The graft varieties produced here have earned a name even outside the State. Sendamangalam, Tirukkattalai, Immanampatti and Veppangudi also produce fine mangoes.

Jack.—Of greater importance are the *jack* (*Artocarpus integrifolia*) trees which grow in Karambakkudi, Kóttaikkadu and many other places in Álangudi Taluk. The commercial value of the *jack* is great; the timber is utilised in house-construction, the tender fruit (the female inflorescence) is cooked as a vegetable (infructescence) and the ripe fruit, which some-times grow to such a large size as to sell at Rs. 2 each, are much in demand for the sake of the sweet fleshy flakes which are edible.

State Enterprise.—The State has done a good deal in the way of forming plantations. The Forest Department is in charge of some extensive topes of mango and other trees.

The Government also own a number of casuarina (*Casuarina equisetifolia*) topes along the banks of the Vellar and the Perungalur stream which supply fuel to the capital. There are also a few cashew-nut (*Anacardium occidentale*) plantations. The roasting of cashew-nuts is a useful and profitable cottage industry, which at the suggestion of Dr. D. Spencer Hatch, the Government are trying to encourage.

Manures.—The usual manures are green leaves, cattle manure, town and village refuse and ashes. *Viráli* (*Dodonaea viscosa*) is grown extensively on dry lands and its leaves are cut annually for five to ten years. Other green leaves used as manure are those of *Cassia siamea*, *Cassia auriculata* (*Ávárai*) *Pongamia glabra* (*Pungai*), *Tephrosia purpurea* (*Kolinji*), *Thespesia populnea* (*Poovarasu*), *Morinda tinctoria* (*Nona*) *Calotropis gigantea* madar (*Erukkan*) and Red-gram, the Cadjan pea (*Cajanus indicus*). Ryots, especially in the villages of Ilanjavur, Virálur, Sendakkudi, Thanjur, Keelayur, Kodumbalur, Annavasal and Melathur, are coming to recognise the advantages of growing green manure crops in their fields and ploughing them in, so that the atmospheric nitrogen found fixed in the bacterial nodules of the green manure leguminous crops such as the *Daincha* (*Sesbania aculeata*), and *Kolinji* (*Tephrosia purpurea*) and *Sanappu* (*Crotalaria juncea*) is added to the soil. So the growing of green manure crops is more beneficial than applying green leaves. It is also cheaper; the cost of raising them is only Rs. 2 per acre.

A vast quantity of cowdung is made into cakes and burnt as fuel. This matter is engaging the attention of the Government but the problem is, of course, where the ryot is to find an alternative source of fuel-supply (Cf. Report of the Royal Commission on Agriculture in India—1928—paragraph 82).

Hasty criticism of the ryot's wastefulness in thus misapplying valuable manure ignores the real difficulties involved. Even when cowdung is stored for use as manure, however, care is not taken to conserve the valuable urine by spreading litter or earth (to be removed daily) on the floor of the byre, or to form proper pits protected from the heat of the sun for the reception not only of the cowdung but of village refuse of all sorts, with great advantage alike to the fertility of the fields and to the sanitation of the village.

Pests and Diseases.—Pests may be divided into two main classes—Insect pests and Fungus pests. We shall first consider the insect pests that affect some of the more important crops.

Paddy.—(*Oryza Sativa*).

The stem-borer (*Schœnobius incertellus*) is a caterpillar which bores into the paddy stem, kills the shoot and causes white ears. The grub of the Rice-Hispa (*Hispa armigera*) mines into the leaf-tissue while the beetle scrapes the green foliage. The Rice grass-hopper (*Hieroglyphus banian*) feeds on the foliage and cuts away the ear-heads. The caterpillars known as case worms (*Nymphula depunctalis*) cut the leaves into pieces to make cases in which they live, and feed on the paddy blades. The maggot of the paddy gall-fly (*Pachydiplosis oryzæ*) bores into the stem, attacks the bud shoots and causes galls known as 'silver shoots'.

Cholam.—(*Sorghum vulgare*) is affected by the *Cholam* stem-borer (*Chilo zonellus*) which bores through the stem, killing the young plants and damaging the older stems. The Black-hairy caterpillars (*Estigmene lactinea*) and the Root-lice (*Aphis* sp.) affect *Cholam, Ragi, Varagu* and *Cumbu.*

Sugar-cane.—(*Saccharum officinarum*).

Cane stem-borers bore into the stem, killing young shoots and damaging growing canes. Two or more kinds of moths are sometimes found on canes, of which *Argyria stricticraspis* and *Diatrœa venosata* are the most important, White ants

(*Odentotermes obesus*) or termites—often bore into the planted setts under-ground and kill the tender shoots and buds.

Pulses.—Gram caterpillar (*Heliothis obsoleta*): The caterpillars eat the leaves, bore into the seed pods and eat the seeds.

Oil-seed crops.

Ground-nut:—*Surul puchi* (*Stomopteryx nerteria*). This small caterpillar feeds on the foliage and damages it. The *Ver puchi* (*Sphenoptera perotteti*) is a grub which bores into the stem and kills the plant. The Green caterpillar (*Heliothis obsoleta*) affects oil-seeds and Bengal and Red-grams.

Gingelly:—The Sphinx caterpillar (*Acherontia styx*) is a caterpillar which eats leaves and shoots.

Castor:—The caterpillar Castor semilooper (*Achoea janata*) defoliates the plant and the Castor seed-borer (*Dichocrocis puncti feralis*) bores into the seed capsules and petioles. Tobacco caterpillar (*Prodenia litura*) defoliates the castor plant.

Vegetables.—The stem-boring caterpillars (*Euzophera perticella*), the fruit-borer (*Leucinodes orbonalis*) and leaf-folding caterpillars (*Eublemma olivacea*) are common pests.

Fruit crops.—Mango-hopper (*Idiocerus niveosparsus*). The bug sucks the juice from the flower-heads and makes them drop off. The white wriggling maggots of Fruit-flies (*Chaetodacus incisus* and *C. ferrugineus*) bore into the fruit pulp and spoil the fruit.

Fibre crops.

Cotton:—1. Pink boll worm (*Platoedra gossypiella*), a small pink caterpillar, is a serious pest of cotton. It bores into the bolls and feeds on the seeds.

2. Stem-weevil (*Pempheris affinis*) is a small weevil and an important pest especially of Cambodia cotton. The grubs bore into the stem and cause galls,

Tobacco.—(*Nicotiana tabacum*).

The tobacco caterpillar (*Prodenia litura*) does damage especially in the nurseries, while the tobacco aphis or plant lice damage the plants by sucking their juice.

Palms.—Most of the palms, especially the cocoa-nut and the palmyra, are subject to the attack of the Rhinoceros Beetle (*Oryctes rhinoceros*) and Red Weevil (*Rhynchophorus ferrugineus*). The grubs of the weevil bore into the crown and eventually kill the tree, after which the rhinoceros beetle lays eggs and breeds in the decaying stem.

Some common Fungus diseases of crops.

Cereals: Paddy.—False smut (*Ustilaginoidea virens*) is called *Nelpalam* in Tamil. This affects only a few plants; large velvety greenish masses about twice the size of normal grains appear between the glumes. This occurs only when the crop is bumper and the damage done is negligible.

Blast: (*Piricularia oryzae*) *Kollinovu:* Brown spots with grey centres occur on leaves and leaf-sheaths and the nodes and the neck of the ear-head turn black. When the neck of the ears is affected, grains do not develop.

Cholam, Cumbu, Varagu and Ragi.—(*Sphacelotheca sorghi*) *Kariputtainovu*, in Tamil resembles the short smut; but does not cause such serious damage. Leaf-shredding disease (*Sclerosporia graminicola*) *Talainovu*, in Tamil, checks the formation of ear-heads. Even if they are formed the grains do not set.

Pulses.—Wilt (*Rhizoctonia* sp.) causes the leaves suddenly to droop and dry up.

Ground-nut.—*Tikka-leaf spot* (*Septogloeum arachidis*). Dark spots each surrounded by a bright yellow ring appear in large numbers on the leaves which consequently fall off.

Tobacco.—Mildew (*Erysiphe cichoracearum*) *Sambalnoi*, in Tamil, is a very common disease causing severe damage.

Chillies.—Fruit-rot (*Colletotrichum capsici*)—in Tamil,—*Alugalnoi.* The fruit turns yellow and rots. It also loses its characteristic pungency.

Palms.—Budrot (*Phytophthora palmivora*). The central shoot yellows and dries up and the other leaves drop off one by one.

Sugar-cane.—Red-rot (*Colletotrichum falcatum*)—in Tamil,—*Sembulli pulippu noi*: is a widely distributed disease. On splitting an affected cane a sour smell may be noticed and the tissues become red. Definite red patches with a transversely elongated white centre are present.

Fruit crops.—Mango: Sooty mould (*Capnodium mangiferæ*): A dense black sooty crust appears particularly on the upper surface of the leaves.

Local remedial measures.—The local remedial measures consist in sprinkling ashes over plants affected by aphis or plant lice, and lime water on those affected by insect and fungus pests. In the event of an attack by any pest, pig-manure or cake-manure is said to be applied to stimulate the plant. The field is sometimes allowed to dry.

Prickly-pear.—No account of pests and other disabilities of local agriculture would be complete without a reference to the common prickly-pear (*Opuntia dillenii*).

This exotic cactus was probably introduced into India on account of its usefulness in forming impenetrable fences. It was introduced into the Madras Presidency before 1786. It soon spread over large tracts and became a serious nuisance, being extremely difficult to eradicate or control. Though capable of being converted into fodder, and also into manure, its drawbacks far outweigh such utility as it possesses. Dense thickets of this plant in the neighbourhood of villages are by no means favourable to sanitation and harbour snakes. There have been

periodical prickly-pear crusades in all parts of South India. The one that took place in Pudukkottai at the time of Sir A. Sashayya Sastriar is still remembered. The plant effectively resisted all attempts to extirpate it by uprooting, burning and burial. Recently, however, the introduction of the *Cochineal* insect which feeds on it, has had a most remarkable effect in reducing the area covered by it, both in Pudukkottai and in South India generally.

Popular agricultural beliefs, etc.—These are a body of empirical maxims handed from father to son, and crystallising the wisdom or in some cases it may be the unwisdom, of generations. The conservative tendencies of the ryot have preserved them to this day with all the accretions that religion and superstition have made thereto.

The Hindu ryot believes in the efficacy of *Varuna japam* or the recital of hymns to Varuna, the rain-god, for the purpose of securing rain. When pests ravage the crops, or the rains fail, the lower-caste peasantry betake themselves to the *Pusári* through whom sacrifices of sheep, etc., are offered at the altars of the godlings of the rural pantheon.

Another curious way of invoking rain is for the village elders or priests to beg boiled rice and sauce from every house in the rainless village. When a sufficiently large quantity of rice and sauce have been collected the inhabitants go out in a body to the nearest water course or channel where the two are mixed, and male and female figures are formed with them on the dry sand. The people gather round the figures, beat their breasts, and set up a cry of lamentation loud enough, it is hoped, to be heard in Heaven.

Some of the rules of husbandry embody sound agricultural principles. One of them which runs "அகல உழுகிறதைக் ஆழ உழு" brings out the superiority of deep ploughing over superficial ploughing. "மேழிச்செல்வம் கோழைபடாது," which means *there is nothing like the riches that the plough yields*, further emphasises

the value of ploughing. "*பயிர் பாராமல் கெட்டது, கடன் கேளாமல் கெட்டது*" inculcates the need of constant care and supervision of the fields, comparing the careless cultivator to the creditor who having never insisted on the repayment of his dues loses his money in consequence.

A very familiar maxim predicts rain when ants carry their eggs about in search of shelter. The croaking of frogs and the flight of winged insects called *ésal* (Termites: winged forms), for instance, are also supposed to presage rain. Should the sun be obscured on Sunday mornings especially in the wet season, continuous rain is to be expected for a week. Rainless days are in store if lightning should be seen North-East in *Vaikasi* and *Ání* (May—July). Lightning in *kódai* (summer) is as bad as thunder in *kálam* (winter), for neither is a sign of wet weather. Again, a halo seen round the *Kártigai* (November—December) moon portends dry days. To expect rains after *Kártigai* is as fruitless, says a * Tamil proverb, as to expect liberal gifts from any person other than Karṇá, a Mahábárata hero famous for philanthropy.

Agricultural stock Implements : The State Agricultural Department has been successfully advocating the use of cheap, efficient and improved mouldboard iron ploughs, which not only go deeper into the soil but also conserve the soil moisture. "Roll-easy" mhote wheels and pumping plants are coming into use for irrigation in Annavásal, Puliyúr, Seṅgampatti and Ádanúr.

Live-stock : The local beasts are generally puny and under-sized, and do not belong to any distinctive breed.

To improve the local breeds, the State is maintaining a Stud Farm attached to the Agricultural Farm at Pudukkottai. There were 6 stud bulls in the Farm, at the close of Fasli 1344. The total number of cows served in the fasli was 347. Ryots who come to the weekly market in the town bring their cows

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* *கார்த்திகைக்கப்புறம் மழையில்லை, கர்ணனுக்கப்புறம் கொடையில்லை.*

for service at the Stud Farm. The fee for service was recently reduced from annas 12 to annas 6.

Besides the Stud Farm, there is a model Dairy Farm which had on June 30, 1935, nine milch cows, three adult heifers, seven weaned she-calves, seven suckling she-calves and one suckling bull-calf. The Scindi cows in the farm are heavy milkers; and their milk is rich in nutrients. The total supply of milk during the last three faslis was as follows :—

Fasli 1342	...	...	... 7,842 measures.
Fasli 1343	...	...	... 6,192 measures.
Fasli 1344	...	...	... 9,496 measures.

The dairy supplies the palace and its pure milk meets a real want in the town. It was working at a loss, but now it is not owing to reform of diet that has resulted in an increasing demand for good milk. The Darbar are now prepared to subsidize ryots who maintain approved stud-bulls (see below).

Cultivation expenses.—The expenses of cultivation are hard to determine. Few subjects are more controversial. Moreover they vary appreciably from place to place, and even from field to field, and depend greatly on the skill and prudence of the individual farmer. According to a proverb* locally current, very little is left to the ryot after reckoning up the entire cost of husbandry. The cost of cultivation of wet lands in the State is higher than in the delta district of Tanjore or in Trichinopoly or Madura. More manure is required for the wet lands in the State than in those Districts. The Settlement Scheme Report of 1910 fixes the cultivation expense for the best wet fields at Rs. 16 and for the best dry lands at Rs. 7 per acre. There is no reason to believe that the cost of cultivation has considerably increased since 1910 though wages have slightly increased. But an important point to bear in

* The proverb has been rendered into English as follows :—
" If the ploughman counts the cost
His ploughshare even will be lost ".

mind is that about 96 per cent of the ryots in the State cultivate their own lands with their own labour and that of their families. Thus they have no need to incur a large proportion of what are included in any conventional enumeration of cultivation expenses. They can and do make a living, both on this account and because of their personal interest in the land, where the absentee landlord may find that the income from his estate is decidedly disappointing at present prices.

Tenures.—The existing tenures are of three kinds—*mél váram* or sharing tenure, *kuttagai* or lease, and *pannai* or hired labour.

Under the *váram* system, the *swánthar* or landlord has his fields cultivated by *kudis* or cultivating ryots, and shares with them at the end of the season a portion of the produce. The *kudi* is a native of the soil, attached to and possessing an interest in the land. He has the inalienable right (*kudikáni* right) to cultivate the land and the *swánthár* can collect only the mélváram. He supplies his own seeds, ploughs and cattle, employs his own hired labour, whenever extra hands are required, and generally meets all charges of cultivation.

In the case of the best wet lands, the landlord and the ryot divide the paddy equally, and share the straw in the ratio of 1 to 5. This is called *sari* (half-and-half) *váram*. As regards dry and inferior wet lands, the *swanthar* receives a third or two-fifths of the produce, the ryot getting much more of the straw. These systems are known respectively as மூணாத்தில் ஒன்று (one-in-three) and அஞ்சுக்கிரண்டு, or அஞ்சுக்கு மூன்று (two-in-five, and three-in-five).

Under *kuttagai* tenure, the lands are leased for a fixed money rent calculated on the basis of the average yield for a number of years. This is about Rs. 24 an acre for the best wet lands, and Rs. 3 for dry. The risks of bad seasons are borne by the lessee, but the lessor often finds that the permanent interests of his land have been neglected under the *kuttagai* tenure.

Under *pannaiyál* system, the proprietor looks after the cultivation himself. He engages hired labourers, or *pannaiyáls*, who, whatever their position in the past—serfdom or slavery—have long since emancipated themselves, with freedom to transfer themselves from farm to farm, and demand their own terms. Their remuneration, which is always paid in kind, is generally about 50 Madras measures of grain a month. They are also entitled at the end of the season to an additional remuneration amounting to nearly 10 per cent of the harvest. They are also allowed a piece of land called *pariyál* which is a *nadugai* ($\frac{1}{8}$ acre) in extent planted with the landlord's seedlings, cultivated by the *pannaiyal* and harvested for his own benefit entirely. When it is the *pannaiyal's* lot to work under wealthy landlords, he is fed as well as clothed. He gets a pair of loin-cloths or a *cumbli* (woollen blanket) once a year. He also receives small presents, in the shape of cloth, paddy, and cash, ranging from some annas to a few rupees on the occasion of deaths and marriages in his family.

His lot is thus not so precarious as that of the *atha* coolies or day-labourers, adult or juvenile, of either sex. They are found under all tenures, and earn a scanty livelihood by hiring themselves whenever extra labour is required for transplanting, harvesting, or other operations. During employment adult males earn about six to eight local measures of grain and others about four per diem. Their condition is deplorable when lands are idle from drought, or lie fallow after harvest. In those hard months, they keep the wolf from the door by gathering *avarai* bark, *kanjira* (*nux vomica*) nuts, jungle-fruit, and cowdung, and selling them for what they will fetch.

The evils of absent-landlordism are not so pronounced here as elsewhere. According to the latest official returns, resident and non-resident ryots are 59,095 and 19,413 respectively, the former being rather over three times as many as the latter.

Joint-holdings are rare except in the case of dry inferior lands used as pasturage.

STATISTICAL TABLES.

I. Number of live-stock in the State in fasli 1344 (1934-35).

(a) *Cattle and Buffaloes :—*

	Cattle.	Buffaloes.
Males:		
1. Breeding bulls (males over three years kept or used for breeding).	1,187	352
2. Working bullocks	79,508	5,156
3. Bulls and bullocks over three years not in use for breeding or work.	3,830	808
4. Young stock		
(a) under 1 year	8,657	2,187
(b) 1 to 3 years of age	9,309	1,770
Females:		
1. Breeding cows (cows over 3 years kept for breeding or milk production).	45,561	14,496
2. Cows over 3 years used for work... ...	7,176	1,408
3. Cows over 3 years not in use for work or breeding.	5,091	1,083
4. Young stock		
(a) under 1 year	11,190	3,705
(b) 1 to 3 years of age	7,651	2,742

(b) *Other animals :—*

1. Sheep		216,221
2. Goats		85,745
3. Horses & Ponies	Horses ...	101
	Mares ...	85
	Ponies ...	9
4. Donkeys		847

(c) *Ploughs:—*

1. Wooden	54,037
2. Iron	122

(d) *Carts:—*

Carts	15,765

(e) *Mechanical appliances:—*

1. Sugar-cane crushers	
(a) worked by power	Nil.
(b) worked by bullocks	1
2. Oil Engines with pumps for irrigation ...	172
3. Electric pumps for tube wells	22

II. Statement of the prices of staple food-grains for Faslis 1340 to 1344 (during the month of June) in seers per rupee:—

	Fasli 1340	Fasli 1341	Fasli 1342	Fasli 1343	Fasli 1344
	Seers.	Seers.	Seers.	Seers.	Seers.
1. Rice ...	6'62	7'30	9'43	9'59	8'25
2. Ragi ...	17'08	14'86	20'52	20'76	12'21
3. Cholam...	13'62	14'31	18'05	18'05	10'99
4. Cumbu ...	12'64	9'98	14'22	15'59	10'28

Labourers' wages:—

Place.		Unskilled labourers.	
	Man cooly.	Woman cooly.	Boy or girl cooly.
	AS.	AS.	AS.
Pudukkottai ...	6—8	3—4	3—4
Alangudi ...	5—6	2—3	2—3
Tirumayam ...	6	4	4
Kolattur ...	5	3	3

III. Statistics of persons who follow agriculture as a profession.*

(*a*) Owing to the fact that the majority of the ryots are drawn from communities whose hereditary occupation is agriculture, the number of those who derive their income from land, without themselves taking part in the actual agricultural operations, forms only four per cent of the total number of owners and tenants.

	Not cultivating at all but taking rent in money or kind.		Cultivating solely by cooly labour.		Cultivating with family labour or with partial help from coolies.	
	Men.	Women.	Men.	Women.	Men.	Women.
Total ...	**1,778**	**1,045**	**741**	**600**	**67,752**	**26,067**
Owners ...	1,376	880	638	540	60,403	23,465
Tenants ...	402	165	103	60	7,349	2,602

* The figures are taken from the Census Report of 1931

(*b*) The number of persons to whom cultivation is a subsidiary occupation was 11,446 (9,236 men and 2,210 women) in 1931. Of these, 1,361 men and 103 women were non-cultivating proprietors taking rent in money or kind. A large number of such persons are Government servants, members of the learned professions or money-lenders.

(*c*) The following castes contribute nearly 60 per cent of the non-cultivating proprietors:—

1.	Brahman	... 302.
2.	Kallan	... 246.
3.	Valaiyan	... 192.
4.	Vellalan	... 190.
5.	Nattukkottai Chetti...	... 150.
6.	Other Chetti communities	... 117.
7.	Mussalmans ...	... 125.

(*d*) Over 60 per cent of the cultivating owners come from the following communities:—

1.	Kallan	... 17,263.	4.	Idaiyan	... 7,109.
2.	Valaiyan	... 11,741.	5.	Nattaman	... 5,131.
3.	Paraiyan	... 7,135.	6.	Christians	... 4,280.

(*e*) Tenant cultivators are mainly:—

1.	Valaiyans...	... 2,934.
2.	Pallans ...	... 2,151.
3.	Paraiyans...	... 1,042.

(*f*) More than three-fourths of the agricultural labourers are:—

1.	Valaiyans...	... 5,872.
2.	Paraiyans...	... 5,024.
3.	Pallans ...	... 4,236.
4.	Idaiyans ...	... 1,436.
5.	Kallans ...	... 1,039.

(*g*) 63 per cent of the miscellaneous unskilled labourers are:—

1.	Valaiyans...	... 4,021.
2.	Pallans ...	... 3,387.
3.	Paraiyans...	... 3,318.

Area (in thousands of acres) under principal crops grown in the Pudukkottai State.*

Years.	Rice.	Ground-nut.	Food grains and pulses.	Gram.	Ragi.	Cholam.	Cumbu.	Sugar-cane.	Til.	Cotton.	Coconut.	Maize.
1924–25 ...	119.1	45.9	56.7	29.1	36.1	21.7	11.4	0.9	0.8	...	...	...
1925–26 ...	101.7	45.0	47.6	...	34.9	22.7	10.1	...	0.74	2.1	...	...
1926–27 ...	90.7	42.0	44.6	21.3	27.4	16.2	9.3	...	0.9	1.7	...	...
1927–28 ...	36.7	37.8	42.0	15.1	26.0	26.4	6.3	...	0.6	1.5	...	...
1928–29 ...	62.6	39.7	38.7	26.6	39.7	21.6	5.7	...	0.6	2.1	...	...
1929–30 ...	111.8	31.1	44.1	24.8	45.6	11.9	6.9	...	...	1.5	...	...
1930–31 ...	121.7	27.0	41.0	21.2	28.7	23.3	...	...	...	0.6	...	...
1931–32 ...	110.8	17.4	56.5	29.0	21.8	14.7	3.9	...	0.7	...	0.9	...
1932–33 ...	132.8	16.5	56.2	26.6	27.7	11.4	6.5	...	2.4	...	0.94	...
1933–34 ...	116.0	19.1	43.4	35.6	29.5	15.0	13.1	...	...	...	...	...
1934–35 ...	56.1	15.4	35.4	31.4	26.6	8.4	6.1	...	...	1.6	...	1.0

AGRICULTURAL DEPARTMENT—RECEIPTS AND EXPENDITURE.

The receipts of the Agricultural Department during Fasli 1344 were as follows:—

		Rs.
1.	Sale of garden produce	450
2.	Sale of seed	188
3.	Miscellaneous	2,052
	Total ...	2,690

The expenditure, excluding salaries, etc., of the establishment amounting to about Rs. 5,200, was—

		Rs.
1.	State Farm	6,822
2.	Purchase of implements and seed ...	554
	Total ...	7,376

Productive capacity of lands.—For reasons already given in the paragraph on the classification of lands, the yield of wet lands in the State is lower than in the adjoining Districts. Some of the best wet lands are reputed to yield 10 kalams

* These figures have been taken from the charts exhibited on the occasion of the State Co-operative conference at Viralimalai.

a *nadugai*, equal to 1,800 Madras measures an acre, but this out-turn is exceptional. Ordinarily, the production varies between 900 and 270 Madras measures. Dry cultivation stands on a different footing. Where the cultivator is enterprising and hard-working, and spares no expense on manure, as on the Nattambádi farmsteads in the Álangudi Taluk, the yield may be as much as 40 per cent higher than normal. Otherwise, 360 Madras measures an acre for *ragi*, 550 for *varagu*, 350 for *cumbu* and 550 for ground-nut may be taken as the average. This out-turn of dry crops compares very favourably with the that in adjoining Districts of Tanjore and Trichinopoly.

Sale value of land.—In estimating the sale value of land, regard must be had to two factors :—whether it is near a Chetti village, and whether it is occupied by efficient cultivators. Since the Chetties are fond of investing their savings in land, a *veli* (6·74 acres) in the Tirumayam Taluk sometimes sells at Rs. 10,000. Dry lands under Nattambádi cultivation fetch as much as wet lands. In ordinary circumstances, the sale value of wet lands may be taken to be Rs. 100 to 150 per acre and that of dry lands Rs. 30.

The Peasantry and their economic condition.—Though the State ryot has not the advantage of irrigation from any river in which there is more than an intermittent flow, the tanks in the State are numerous (perhaps too numerous), and the supply of leaf manure plentiful. The soil, though not of the richest, is not unfruitful. The incidence of taxation cannot be considered heavy,—it is lower than in the adjacent British districts,—and the average incidence is reduced by the large area of inam lands and the absence of any charge for a second or third crop. This is an advantage that must be set against the absence of an automatic system of remission even in normal years on lands that do not yield owing to causes beyond the ryots' control such as prevails in the Madras Presidency. If the cultivator is indebted, that is perhaps due to his improvident ways but certainly not to heavy fiscal burdens.

State Aid : Recognising the fact that the ryot is generally conservative and ignorant, the Darbar have attempted in various ways to acquaint him with improved and scientific methods of cultivation. The first important step was the opening of numerous rural Co-operative Societies which were liberally financed by the Darbar. The work of these societies is described in the Chapter on "Co-operation". An agricultural school was opened in the Town in Fasli 1328 (1918—19) for the benefit of the children of the ryots. It soon became evident that it would be a more effective policy to attempt to instruct the cultivators in their villages. The Government therefore abolished the school in 1924, and appointed Agricultural Instructors to tour in the different taluks, and instruct the ryots by means of informal advice, lectures and practical demonstrations. They then established the State Farm at the capital near the ground where the weekly 'Shandy' (fair) is held. The Farm attracts a large number of villagers every Friday. From the year 1925 till the school was abolished, an agricultural class was attached to the State Training School at Tirugokarnam; and the teachers under training received practical instruction in the State Farm as a branch of Rural Science, which they were expected to teach in their schools in the villages, so as to give Elementary Education a "rural bias". Agriculture was introduced as an optional subject for the Secondary School Leaving Certificate Examination in the High-School section of the Rajah's College in 1935-36.

An Association called the "Pudukkottai Agricultural Association", composed of officials—mostly Revenue officers—and non-officials was in existence for some years. It issued leaflets in the vernacular, sold seed and conducted demonstrations. This Association became defunct when the State Farm was established. An annual exhibition (called the Marthanda Exhibition) was held in the capital for a number of years up to 1920. Its features included lectures and practical demonstrations bearing on agriculture. It was then thought that an

exhibition of this kind would be more useful if held in connection with a popular rural religious festival, and hence from 1926 till 1933, it was held at Narthamalai in connection with the annual festival of the Mariamman temple. It was, however, abandoned "as it did not seem to justify its existence".* In October 1925, a conference of ryots presided over by the Deputy Director of Agriculture, Trichinopoly, was held at Tirumayam.

The programme of work carried out by the Agricultural Instructors and the Manager of the State Farm include instruction and demonstration in economic planting, proper seed selection, the ridge-and-furrow system of cultivation, rotation of crops, the utility of green and artificial manures, and the methods of combating crop diseases, especially by the application of stimulant manures. The introduction of Combodia cotton as a garden crop, either pure or mixed with *Cholam* and of new and useful varieties of paddy such as *Kichili Sambá*, of plantains and cocoa-nuts and of garden crops such as Elephant yam, tapioca, turmeric, tomato, capsicum, *brinjals* and radish has met with some success. Sugar-cane is now largely cultivated and has proved a paying crop, yielding an annual net profit of Rs. 300 per acre. In Fasli 1344 a drought-resisting strain of *Cumbu—bajri*, an African variety, and fruit plants of the citrus variety were introduced.

The State Farm is now very useful as a seed depôt and sells annually a quantity of paddy, ground-nut, green manure, vegetable seeds and chemical manures. The staff were running a show stall at the weekly market accompanied by magic-lantern lectures till 1933, when it was stopped as it did not attract a sufficiently large number of visitors. A plot at a short distance from the Farm was reserved for Senna cultivation, but this experiment has been given up as unprofitable.

* Administration Report—Fasli 1343.

Poultry-keeping and bee-keeping are now being started at the Farm. There are also some hives of bees kept in "Ananda Bagh" Park and poultry at the Vijayaraghunatha Dorai Raja Poor Home

Useful work has been done in the introduction of iron ploughs, such as the Meston, Monsoon and *Konkon* ploughs, and of the "roll-easy" mhote wheels to replace the ordinary country wheels.

Another direction in which the State helps the ryots is by the grant of agricultural loans and loans for well-digging. In Fasli 1335, the Darbar revised the rules relating to well-digging loans; the rate of interest was reduced to 4 per cent; no interest was charged for the first 12 to 18 months; and the period of repayment was extended from 10 to 12 years. In honour of the visit to the State on December 13, 1933 of Their Excellencies the Viceroy and the Countess of Willingdon, the Darbar were pleased to declare that all agricultural loans outstanding on that date would be considered to have been granted free of interest. The balance due to the Darbar at the end of Fasli 1344 by way of loans for purely agricultural purposes was Rs. 382,151 and by way of house-building advances, Rs. 25,452 making a total of Rs. 407,603. Owing to the severe drought in Fasli 1343, the Government ordered the postponement for one year of the collection of the instalments of principal and interest due in that fasli.

The Darbar have come to the conclusion that Scientific experiments concerning agriculture conducted by the department should be concentrated in a few chosen centres. They expect the co-operation of the public, and if enlightened ryots will open private experimental stations, the Darbar are prepared to help them with all the expert advice and guidance that they may need. It is an encouraging sign that the Co-operative Conference held at Viralimalai in February 1936 had an agricultural exhibition attached to it.

The agricultural interests of Pudukkottai are in many ways identical with those of the surrounding British districts. When a granary pest (*Rhizopertha dominica*) invaded the State from the adjoining Madras districts in 1935, the Government of Madras were so good as to depute their Assistant Entomologist and Mycologist to visit the State and suggest measures for its eradication. Pudukkottai joined in the general campaign started by the Madras Agricultural Department for the destruction of prickly-pear by means of the *cochineal* insect, which as already stated has enormously reduced the quantity of prickly-pear.

On July 7, 1936, a conference at which the Administrator presided was held in Pudukkottai, to discuss problems relating to the control of cotton pests, cultivation of tobacco, dry farming, etc. It was attended by the Deputy Director of Agriculture, Trichinopoly, and the Government Entomologist and Cotton Specialist of the Madras Government. Difficulties connected with the enforcement of the Cotton Pest Regulation (Regulation 7 of 1921) in order to eradicate the pink and spotted boll-worms, agricultural demonstrations on the ryots' own holdings with the help of the Agricultural Instructors, the extension and improvement of economic crops such as Sugarcane and plantain and the possibilities of fruit culture in the State were among the problems discussed. The Darbar are giving these questions their careful consideration.

Mention has already been made of the dairy and the stud-bulls at the State Farm. In connection with their general programme of Rural Improvement the Darbar are anxious to secure an improvement in the breeding and feeding of cattle and buffaloes. An announcement in the State Gazette, dated July 1, 1936, is an indication of the Darbar's anxiety "to make available to cultivators an adequate supply of good stud bulls." The Darbar have offered to make a money grant of from Rs. 100 to Rs. 150 to the owner of a breeding bull of which the fitness and capacity

for service has been certified by the Agricultural Instructor and the Touring Veterinary Assistant and approved by the Dewan Peishkar. The grant will be made at the end of the year, after inspection of the bull, and on the same conditions up to a maximum of three years. A smaller sum will be paid if the conditions prescribed by the Darbar are not entirely satisfied, but the bull is maintained in good condition. The Darbar are prepared to lend Government breeding-bulls on certain conditions to Municipalities or other local bodies, Co-operative Societies, Panchayats, etc. The notification also mentioned some important details regarding the care and treatment of breeding bulls. Whether the ryots will embrace this offer remains to be seen.

The question of agricultural-indebtedness has not been overlooked by the Darbar, though it cannot be claimed that a solution of the problem is in sight. Circumstances preclude their undertaking any heavy financial responsibility such as other more fortunate States elsewhere have been able to shoulder. An Agriculturists' Relief Bill was introduced in the Legislative Council in 1934, but in Select Committee its fundamental principles were amended out of existence, and the Darbar have, therefore, not proceeded with it. The Darbar have also appointed a committee to suggest measures for improving the position of the agriculturists and await their recommendations.

Administrative.—After the closing of the Agricultural training school and experimental farm which were found to work at a loss in Fasli 1314, the Darbar appointed an Agricultural Inspector and placed him at the disposal of the Pudukkottai Agricultural Association in Fasli 1317. In fasli 1321 after the State Farm was opened, a second Agricultural demonstrator was appointed to be in charge of the Farm. In fasli 1325 a third instructor, and in fasli 1327 a fourth were appointed. The Department was at first under the control of the Dewan Peishkar, but in January 1926, was transferred to the charge of the Development Officer, then temporarily created,

The Department was reorganised in fasli 1338. The State was divided into two divisions—east and west,—each under an Instructor, while the farm continued to have its manager. The post of Development Officer was abolished in June 1932 as a measure of retrenchment, and the Agricultural department was transferred to the charge of the Superintendent of Salt, Abkari and Forests. In August 1933, the control of the department was again transferred to the Dewan Peishkar.

CHAPTER V.

IRRIGATION.

Rivers.—As has been remarked already in Chapter I, the absence of perennial streams is a serious handicap to agriculture in the State. The so-called rivers (see Chapter I) are fed merely by the surface drainage of jungles and waste-lands or by the surplus water of large tanks. Since most of them depend on tanks, and the tanks only surplus temporarily and after heavy rains, the rivers are seldom full for more than a few days at a time. Their intermittent flow can be intercepted by dams and stored up in tanks lower down. Tank-irrigation is the only method practised or practicable. There is no scope for irrigation from canals.

Of the numerous streams that flow through the State, the following deserve mention.

The Vellar.—The *Vellár* is the largest stream in the State. Fed by the British tank at Vallanád, it enters the State at the Minavéli tank in the west, and having run a course of nearly 38 miles within it, crosses the boundary at Kotha-mangalam village in the east with a calculated maximum discharge of 24,000 cubic feet per second. Along its course there are seven anicuts or dams, from which water is taken to a number of tanks. Most of these have been in existence from the remote past, and have been restored and improved. Three of them are of masonry. There is an anicut near Kudumiámalai from which water is diverted to Visalúr, Vayalókam, Perumánádu and Kavinád tanks. Another at Sendamangalam consists of a body-wall right across the river with a head-sluice and a sand-escape at one end. From this anicut water is taken direct to the Kavinád tank, the largest in the State. This tank has three surplus weirs, one of which feeds the tanks lower down, while the other two discharge back into the Vellár itself. The third masonry dam is the Holdsworth anicut which feeds the Vallanád tank.

The Pambar.—Next in importance is the Pámbár with a course of about 19 miles within the State, and a maximum discharge of 21,000 cubic feet per second. It rises out of Perundurai tank, 3 miles west of Tirumayam, crosses the boundary near Válaramánikkam, re-enters the State, and discharges itself into Irumbánádu tank, the surplus water of which feeds two or three other State tanks before the river finally leaves the territory. There is a masonry anicut across it at Nedungudi, which supplies a series of tanks near the Kílánilai fort. There are also numerous mud-dams along its course.

The Agniar.—The *Agniár* (Agñánavimóchani) rises in the Kolattúr tank, and leaves the State beyond Karambakkudi, after a course of nearly 28 miles. It has a maximum discharge of 15,000 cubic feet per second.

The Ambuliyar.—The *Ambuliyár* has a course of only 17 miles within State limits. It rises out of Manjankanmoi tank, and feeds a large number of tanks in Álangudi Taluk. A small masonry dam has been recently built to divert its water to a number of tanks beginning with the Brahadambálsamudram tank.

On the less important streams, though masonry dams are few, there are numerous mud-dams from which water is diverted to tanks. It has been calculated that there is on an average a dam to every two miles of river.

Tanks.—The tanks in the State are of two types, those that impound the intermittent floods in the larger streams, and those that merely intercept surface water from their catchment area. In forming the second type of tanks advantage has been taken of the general slope of the land and of local surface depressions, and more or less crescent-shaped 'bunds', or embankments, have been thrown up to arrest and hold up the surface drainage water. *Uranis* are artificial ponds of inconsiderable extent, but deep relatively to their size, and sometimes revetted. They often constitute the only source of

drinking water for man and beast in rural areas, though a very large number of new wells has been sunk in villages in the last couple of years. They are also used for bathing (if not conserved, and sometimes, it is to be feared in spite of their being conserved, for drinking) and are seldom used as sources of direct irrigation.

There are 3,943 tanks in the State, of which 139*, each capable of irrigating 200 acres or over, are classed as 'Major,' and the rest as 'Minor.' The number of tanks per square mile of the total area is roughly 3·5. The largest tanks having an ayacut or irrigable areá of over 500 acres each are—

Tirumayam Taluk.—

1. Irumbánádu Periyakanmoi.
2. Mirattunilai Periyakanmoi.

Álangudi Taluk.—

3. Kavinád Periyakanmoi.
4. Vallanád Periyakanmoi.
5. Palayakanmoi.
6. Ragunáthapuram Karaikkulam.
7. Sembáttur Periyakulam.

Kolattúr Taluk.—

8. Annavásal Periyakulam.
9. Perumánádu Periyakulam.
10. Vayalókam Periyakulam.

Sometimes two or more tanks have a joint ayacut, or, again, small tanks are formed within the ayacuts themselves, sometimes to intercept the drainage of the fields higher up.

The irrigation tanks are generally linked in series. Each tank, except the first in a series, besides intercepting local drainage, is fed by the overflow of the one immediately above it, and feeds in turn the one immediately below it. The slope of the country is generally gradual. Hence the bunds of the lower tanks in a chain cannot be raised above a certain level for the

* 139 major tanks are enumerated in Appendix I to the Pudukkóttai Irrigation Regulation, No. III of 1933.

purpose of increasing their storage capacity, since the result would be to submerge the crops in the foreshore, irrigated by the tank above. The tanks are therefore generally shallow, and most of them require to be filled more than once (many of them several times) a season, in order that their entire ayacuts may be irrigated.

There are 146 series of tanks in the State. The area covered by a series, or group of series, constitutes a 'basin' which is named after the river into which the surplus of all the tanks in it finally discharges. Thus the Mirattunilai tank group, the Kavinád tank group, the Perumánádu tank group, and others constitute what is called the Vellár Basin. There are 11 such Basins, of which the Vellár Basin with an area of 320 square miles is the largest, and the Tirunallár Basin of 10 square miles the smallest. The following table exhibits the basins, their tanks, and their areas:—

Basin.	Number of groups in Basin.	Number of tanks.
1. The Vellár Basin	46	1,166
2. The Agniár Basin	27	710
3. The Pámbár Basin	15	543
4. The Koraiyár Basin ...	29	429
5. The Cauvery Lower Basin ...	8	230
6. The Ambuliyár Basin ...	5	128
7. The Maharájasamudram Basin.	4	88
8. The Virushuliár Basin ...	8	236
9. Mámundi River Basin ...	1	111
10. The Manimuthár Basin ...	2	47
11. The Tirunallár Basin ...	1	23
Total ...	146	3,711

Irrigation Projects and Schemes. A Retrospect.—The inhabitants of Pudukkóttai, a country subject to uncertain rainfall, and in whose rivers the flow is but intermittent, must have always been occupied with schemes for the conservation of the scanty supply of water. The Vellálars, who were among the earliest settlers, seem to have been the first to take seriously

to agriculture. They saw even in those early days the wisdom of raising dams, forming tanks and sinking wells. The system of linking tanks mentioned above originated with them. In each succeeding age the system was extended and improved by princes, chieftains, and landlords, who constructed additional tanks, or provided new channels, and dams.

The State has always considered the maintenance and improvement of the irrigation works as a legitimate charge upon the public revenues. It has always, in modern times, done what it could by way of repairing eroded or breached bunds, providing and repairing calingulas and sluices, and digging channels from river to reservoir. In 1893—94 it was recognised that "too much attention cannot be paid towards this kind of work," and that "though much had been done in the past more remained to be done in a matter which affected at once the prosperity of the ryot and the revenues of the State." An attempt was made to secure the co-operation of the ryots in the maintenance of the irrigation sources; a matter of vital importance to them, and one in regard to which they had by immemorial custom certain obligations. To these obligations a statutory sanction was attached by Regulation IV of 1903. In 1895, Tahsildars were relieved of their magisterial duties in order that they might devote greater attention to securing labour for the improvement of minor irrigation works, which were found to have been neglected. In 1897, the Darbar decided that "unless a regular survey of the several systems is made by a competent Engineer," real improvement could not be expected. A Special Engineer was consequently appointed to devise schemes and suggest projects, and what follows is largely based on his conclusions.

On the one hand, the physical character of the State, which is on a higher level than the river valleys of the Trichinopoly and Madura districts, and on the other, financial considerations, render any scheme for the excavation of channels either from the Cauvery or from the Periyár, impracticable. So far as the

Méttur project is concerned, neither the Government of Madras nor that of Mysore are prepared to allow the State a share of the water.

Within the State there are already too many dams built across the rivers, and too many channels taking off from them, to admit of any addition to their number. The State is already studded with about 4,000 tanks, great and small, and there is much more to be said in favour of reducing the number than of increasing it. Where any scheme for extending an existing tank or creating a new tank or dam is examined, it is almost invariably found that it would involve either cutting off the supply to some other tank or submerging cultivation or habitations, while British ryots in many cases contribute their quota of objections. The Special Officer's view, with which Col. Smart R. E. whom he consulted was in agreement, was that there was "little or no scope for really fresh Irrigation Projects either in the country or from outside," and that all that could be done was to keep the existing irrigation works in good repair, a task, it may be added, for which the State's finances are really not adequate. There can be no doubt that, to look at the subject from the purely financial point of view, a considerable proportion of the tanks cannot pay their way, even if they are merely to be kept in workable order, still less, if they are all to be provided with the latest thing in sluices, calingulas, sand-vents, grade-walls, revetments and so forth, as is expected in some quarters. It has even been suggested (apparently in all seriousness) that *all* the bunds of *all* the tanks in the State should be revetted, and not merely revetted but revetted "with granite stones" (i.e., with blocks of gneiss,) a proposal that overlooks the patent facts *that* if effect were given to it the sum required would be a large multiple of the entire reserves of the State, *that* not all bunds, or even a large proportion of bunds need revetment at all, *that* laterite is a perfectly satisfactory material for revetment and there is therefore no reason why gneiss should be brought from long distances when laterite is

to be found near at hand, and finally *that* the Darbar have for many years been, and still are, pursuing a consistent policy of revetting, (as funds permit,) such parts of tank bunds as are specially liable to erosion or breaching and really require such protection.

The Darbar have recently instructed the State Engineer to experiment with the gravelling of bunds, where gravel is near at hand and therefore relatively cheap. Gravelling appears to afford a very effective remedy for the disease of "gulleying" (which is so discouraging to one who has seen a bund put in first-class order at considerable cost, and finds it badly disfigured a few months later, if rain has been heavy) and may in some circumstances be usefully substituted for revetment.

The Darbar have also been steadily carrying out a programme of putting up dams across rivers wherever necessary. On the Vellár, for instance, we have the Séranur mud-dam and below that the Vísalúr anicut, the Kíranur mud-dam, the Sendamangalam anicut and the Holdsworth anicut. The Kundár has now the Kummangudi, Rárápuram, Gúdalúr, and Chandramati anicuts. The Nedungudi Puliyakanmoi, Anikkini and Edyár dams provide for the irrigation facilities of the Pámbár basin; while the Agniár has the Kanangudi and Thuvár mud-dams. The Rájagiri anicut is one of the latest schemes completed.

The following statement shows the schemes investigated by the Special Officer appointed in 1935 and the orders passed by the Darbar on them:—

Projects.	Darbar's Orders.
1. *Seṅgirai—Formation of a reservoir.*—	Supply to existing tanks would be prejudiced. The capacity of the reservoir would not be commensurate with its cost. Scheme has been therefore dropped.
2. *Várpat—Construction of a dam across Maṇimuthár to take supply to Énadi kanmoi and lower tanks.*	An estimate for Rs. 1,100 for the work has been sanctioned. The work will be executed when funds permit, after collecting the contribution due by the Inamdars.

Projects.	Darbar's Orders.
3. *Peruṅgudi.*— Combination of five small endals near Góvinjan kanmoi into one to supplement irrigation to Góvinjanvayal.	The F. T. Ls. and the deep bed levels of the tanks are different. A common F. T. L. cannot be fixed owing to the proximity of Valayampatti natham and the fields of Ammayan endal in the foreshore. The scheme is therefore not practicable. The weir at the left flank of Góvinjan kanmoi will be rebuilt and a sluice or a channel constructed to supply the endals from the weir when funds permit, and the lands under the endals assigned, if possible, for wet cultivation with the water of the endals.
4. *Combination of Kóttayúr kanmoi, Seṅkulam kanmoi and Ráyavaram kanmoi into one tank.*	The F. T. L. of Kóttayur kanmoi is about four feet higher than that of Senkulam and Ráyavaram kanmoi. If the F. T. Ls. of the latter were raised, foreshore lands would be submerged to a considerable extent. The combination would also be prejudicial to the road leading to Ráyavaram and the lower tanks. The scheme is therefore not practicable.
5. *Tirumayam— Combination of Anai kanmoi and Valavi Chetti endal into one.*	Impracticable because extensive foreshore lands would be submerged.
5-A. *Víra kanmoi, Paramba kanmoi and Théva kanmoi—Taking supply from the Pámbár*	Not possible because their F. T. Ls. are higher than the bed level of the river.
6. *Tirukkalambur – Combination of Ukkarandan kanmoi, Kannapuri kanmoi and Peria kanmoi into one tank.*	Supply to lower tanks would be affected. Valuable dry and wet lands in the foreshore would have to be acquired. The foreshore lands belonging to Sivaganga Zamin would be prejudicially affected. The scheme is therefore not practicable.

Projects.	Darbar's Orders.
7. *Nedungudi—Extension of the river supply from Anavari kanmoi to Véla kanmoi, Sánán kanmoi, etc.*	The supply to the tanks is sufficient. The proposal involves the alignment of a channel through wet lands with cross drainage works involving heavy expenditure without corresponding benefit.
8. *Vayalókam Peria kanmoi.*—Raising its F. T. L.	Not necessary since the tank can already hold sufficient water to irrigate the ayacut with one filling.
9. *Virálúr.*—Restoration of Pudukulam (an abandoned tank.)	Ayacut registered as waste. There is no demand for the lands and therefore no use in restoring the tank.
10. *Virálúr.*—Formation of a small endal to supplement the supply of Kodikulam.	Not possible because the supply to the lower tank Kakkakudikulam would be affected. The scheme would involve an expenditure of Rs. 3,500 without any corresponding benefit.
11. *Rárápuram.* — Improving the dam across Kundár to supply Peria kanmoi.	An estimate for reconstructing the anicut has been called for.
12. *Tennathirayanpatti and Piliyúr.*—Diverting part of the surplus of Periakalarikulam in Tennathirayanpatti to Ráyasamudram in Piliyúr.	The ayacutdars of the lower tanks object to the diversion. Ráyasamudram has an adequate catchment. The proposal has been therefore dropped.
13. *Andakkulam and Mangalathupatti — Restoration of Odaikulam.* — (an abandoned tank lying partly in Andakkulam village, Kolattur Taluk, and partly in Mangalathupatti, Álangudi Taluk) to supplement the supply of Mangalathupatti Sirukulam.	The tank has been restored.

Projects.	Darbar's Orders.
14. *Karukkakurichi West.*—Raising and extending the masonry dam across the Nariár near Vadatheru to increase supply to Semmatti Pudukulam and other tanks.	Not possible because water in the river would then submerge the adjacent fields and the Vettikulam ayacut.
15. *Sokkanáthapatti.* - Formation of a new tank.	This is intended mainly to prevent Malliankulam from being silted up. The outlay of Rs. 10,000 involved is prohibitive. The proposal has, therefore, been dropped but a small silting tank for Malliankulam will be constructed when funds permit.
16. *Sembáttúr.*- Increasing the capacity of Kosamundankulam by extending the bund to the rear and including 2.89 acres.	This would cost about Rs. 1,000 and would not appreciably increase the storage capacity. The scheme has been therefore dropped.
17. *Váráppúr.* — Construction of a masonry dam across Morayár to supply Sinna Tharappa and Peria Tharappakulam.	Site not suitable since the adjoining fields are low. Further, the tanks require river supply only when there is moderate rainfall and not during floods. The ayacutdars can therefore easily put up a mud-dam when necessary, as they have done hitherto.
18. *Semmattividuthi.* — Construction of a dam across the Kalluvari to supply Ráyarkulam in Melaviduthi, Periamánikkamkulam, etc.	The F. T. L. of Ráyarkulam is lower than the F. T. Ls. of the lower tanks. The scheme would therefore benefit only one tank, Ráyarkulam, an Inam tank. The inamdars can easily put up a mud-dam as hitherto. The scheme has therefore been dropped.
19. *Váráppúr.*—Diverting the surplus of Nemméli tank in Váráppúr village to Nainákulam and other tanks.	These tanks have a sufficient free catchment and are fed by streams from forest. No additional supply is needed. Dropped.

Projects.	Darbar's Orders.
20. *Kammangadu.* — Restoration of the ruined anicut opposite to Kammangadu. (Please see scheme 17.)	The tanks can get a supply from the river without an anicut. The restoration of this anicut is therefore unnecessary.
21. *Semmattividuthi.*—Diverting part of the surplus of Kacharankulam in Semmattividuthi to Chettikulam and lower tanks.	F. T. L. of Chettikulam is more than a foot higher than that of Kacharankulam. The F. T. L. of Kacharankulam cannot be raised without prejudice to foreshore lands. Further, Kacharankulam does not require any additional supply.
22. *Tirumananjéri.* — Construction of a dam across the Agniár near Tirumananjéri to supply tanks in Tirumananjéri and Karukkakurichi East Vattams.	The construction of the dam would be objected to by the British ryots. The tanks in Karukkakurichi East vattam already get a sufficient supply from the Ambuliyár.
23. *Pudukkóttai.*-Construction of a masonry dam across the Kundár in place of the mud-dam called Pichan Anai in Pudukkóttai.	This would cost more than Rs. 10,000. The construction of the dam is objected to by persons owning lands fed by the Kundár lower down.
24. *Ichikkóttai.* - Construction of a dam across the Karakondán river to supply Ichikkóttai Periakanmoi and lower tanks.	The Government have directed the State Engineer to submit an estimate. Further action will be decided on after the cost of the dam has been ascertained.
25. *Ambúrappatti.*-Excavating a channel to take the surplus of Perambúr Periakulam to Nallamuthukulam, Pudukurichikulam and other lower tanks.	The tanks have an adequate supply already. Unnecessary. Dropped.

Projects.	Darbar's Orders.
26. *Kílappatti - Rásiamangalam.*—Construction of a new tank.	This would cost Rs. 8,700. The ayacutdars of Kudithángikulam rightly object to the proposal as affecting the supply to their tank. Dropped.
27. *Mángádu.*—Diverting the surplus of Tirumochikulam to Pattikulam and other tanks.	The scheme would cost about Rs. 8,000 and would only benefit Thedamuthikulam which has an adequate supply already. Dropped.
28. *Vísalúr.*—Diversion of the left flank surplus of Vísálikulam to Talayáthi kanmoi.	The surplus from the left flank of the Vísálikulam now flows direct into Vellathandakulam across the ayacut of Vísálikulam submerging some fields in the ayacut on the way. The proposal was to divert this surplus into Talayáthikulam. This involves acquisition of lands and construction of a new channel at a cost of Rs. 10,000. Talayáthikulam into which it was proposed to divert the surplus has an adequate supply already and therefore the proposal has been dropped and instructions have been issued to improve the present course of the surplus channel in such a way as to prevent submersion of the ayacut.
29. *Extension of the Kummangudi channel scheme.*—Taking a channel from the right flank of Arasándampatti kanmoi to Mirattunilai kanmoi, feeding on its way Themathámpatti kanmoi, Govinjan kanmoi and Perungudi kanmoi.	The scheme would involve an expenditure of Rs. 10,000. The ayacutdars of Kavinád and Vallanád tanks object to the proposal Moreover, in normal circumstances, when the river is in flood, the tanks that the scheme is intended to benefit get a sufficient supply already, while when it is not in flood there is not enough water to increase appreciably the supply to even one or two—much less all—of them. The scheme has therefore been dropped.

Projects.	Darbar's Orders.
30. *Taking a channel from the Holdsworth anicut to Mirattunilai tank.*	This involves the acquisition of wet lands in the ayacut of three sarvamányam tanks (Chetti éndal, Neivásalpatti Méla kanmoi, and Kíla kanmoi), excavation of a channel and construction of masonry works. The cost has been estimated at Rs. 5,000, but would almost certainly be much more, since the wet lands that would have to be acquired are very costly and a number of cross aqueducts would have to be constructed to enable the lands north or east of the channel to be irrigated. The drainage of the lands in these ayacuts would also be interfered with, and this would create other problems. No additional lands would be brought under wet cultivation. Also, the Darbar see no reason to suppose that in normal circumstances when Mirattunilai tank was short of water, its supply could be supplemented from the Vellár without prejudice to Vallanád and other tanks. Apart from all other considerations, the Darbar cannot embark upon costly and unremunerative schemes in the present state of their finances. The scheme has therefore been dropped.
31. *The Thánjur channel scheme.*—Diverting the surplus of Mirattunilai kanmoi to Maramadakki kanmoi, Alinji kanmoi, Sethu kanmoi and some tanks in Keelappanaiyur and Thánjur vattams.	The cost of the scheme is estimated at Rs. 6,000. The utility of this scheme depends on an increase in the supply to Mirattunilai tank. It is not feasible to increase its supply. (See schemes 29 and 30 above). This scheme is therefore not practicable.
32. *Ponnamarávati East.* — Construction of calingulas at both flanks of Alavalanthán kanmoi, and a dam across the surplus *vari* at the right flank to facilitate the flow of the surplus to the State tanks Peria Thalippa kanmoi, Sinna Thalippa kanmoi and other tanks lower down.	The Darbar have sanctioned an estimate for Rs. 3,370 for these works. They will be executed when funds permit.

Projects.	Darbar's Orders.
33. *Kummangudi vattam.* — Diverting part of the surplus of Thalayathi kanmoi to Vallamban kanmoi.	An estimate for Rs. 4,680 for constructing a calingula and a weir for Thalayathi kanmoi, to take supply to Vallamban kanmoi, has been sanctioned. The State Engineer has been directed to provide for the works in the programme of Fasli 1347, after collecting the contribution due from the inamdars.
34. *Káramangalam vattam.* — Taking the surplus of Vallamban kanmoi to Káramangalam Peria kanmoi and Áladi kanmoi	There is no use in investigating this scheme till scheme No. 33 has been executed.
35. *Kadavampatti.* – Construction of a dam across the Vellar to supply Kadavankulam.	The site of the proposed dam is in Marungápuri Zamindári. The Zamindári ryots and the lower riparian owners would certainly object to its construction. Even if the dam were constructed, it is doubtful whether it would substantially benefit Kadavankulam. Hence this scheme has been dropped.
36. *Kadavampatti.*—Constructing a masonry work at the left flank of Kadavankulam to take its surplus to Nedunkulam and lower tanks.	These tanks already receive their supply from Kadavankulam. It would be uneconomical to construct costly masonry works merely to benefit these tanks, the ayacut of which is only 37 acres. The scheme has therefore been dropped.
37. *Mánjamviduthi.* — Construction of a calingula for Gnánámbálsamudram kulam.	The tank surplusses at its right flank over a deep and hard bed of gravel. This arrangement is quite satisfactory. No masonry calingula is necessary.
38. *Mánjamviduthi.*— Digging a channel to carry part of the surplus of Gnánámbálsamudram kulam into Pila kulam and lower tanks.	Pila kulam and other lower tanks could only receive any surplus from Gnánámbalsamudram kulam during heavy rains, and in those circumstances the tanks would not require any additional supply. The scheme would involve the construction of costly masonry surplus works. It is obviously misconceived. Hence it has been dropped.
39. *Karuppattipatti.* — Improving the supply to Pidari kulam.	An estimate for Rs. 690 for a grade wall across the Nattani *vari* to supply Pidari kulam has been sanctioned. The work will be executed when funds permit.

Projects from sources outside the State.—A scheme was once put forward for tapping the Cauvery at Kodimudi (on the Trichinopoly—Erode Railway line) and taking it through Kolattúr to Pattukkóttai at a cost of Rs. 100 lakhs. The State was not in a position to execute this project out of its own resources, but it was hoped that the Madras Government might do so for the benefit of its own unirrigated taluks in the Trichinopoly, Coimbatore and Tanjore Districts, and that the State might be able to meet the cost of the works within State limits, in addition to paying for the use of the water. The scheme, however, was abandoned.

In 1900–1901, the Darbar decided that the surplus funds then at the disposal of the State should be largely devoted to irrigation, than which there was no 'nobler object,' and a Tank Restoration Party was organised to investigate the condition of the 'Ayan' tanks, and to carry out new and useful projects. The 'Party' was busy for a number of years preparing an irrigation map and submitting proposals such as the construction of a dam across "the Koraiyár at its junction with the Virálimalai—Kalamávúr road, and the excavation of 2 supply channels from the Vellár Causeway to the Mirattunilai and Vallanád," etc., but nothing practical was done.

The year 1906–1907 saw the entertainment of high but fond hopes that the State ryots would one day realise their long-cherished desire of securing an assured supply from some river in British India, and every scheme projected or investigated by the Madras engineers was carefully studied by the State officers from the point of view of its possibly benefiting the State. As many as seven projects were scrutinised:—

1. The Cauvery project.
2. The Periyár project.
3. The Porandalore project.
4. The Bhaváni project.
5. The Noyel project.
6. The Amarávati Reservoir project.
7. The Nanginiyár project.

The Periyár project related to a scheme for irrigating an additional 26,000 acres by utilising one of the channels from the Periyár intersecting the Railway line between Ammayanáyakanúr and Sholavandán at about 700 feet above Mean Sea level and crossing the Trichinopoly—Madura Road at 550 feet. From this channel a branch channel of over 28 miles in length was to be constructed to Ponnamarávati in the State at 470 feet above Main Sea level.

The Amarávati project was to excavate a channel about 80 miles in length from the Amarávati at Anaipalayam (near Karur). The head was to be near the dam on the river at 446 feet above Mean Sea level, and was to be connected by the new channel with a reservoir to be formed in the State by enlarging the Perámbúr and Nírpalani tanks in the Kolattúr Taluk. This project was also expected to benefit a number of tanks in the Karúr, Kulitalai and Trichinopoly Taluks.

Under the Nanganjiár project, a channel over 115 miles in length was to be excavated crossing the Kodavanár near Rájáppatti (near Karúr), and terminating at Pinnangudi within the State. Since the channel would receive a copious supply of water from June to October, the project was calculated to benefit not only the State but also the British Taluks of Karúr, Kulitalai and Trichinopoly, through which it would pass.

The most imposing scheme, by far, was the Cauvery project under which a channel 130 miles in length was to be constructed at a cost of Rs. 2·78 crores from the Reservoir at Neringipett with its head at 650·00 above mean Sea level. The channel was to run "parallel to, but begin higher up than, the Kalingaráyan channel in the Coimbatore District, and cross the Noyel and the Amarávati by means of dams." The channel was to join the Vellár at Pinnangudi in the State at 400·00 above mean Sea level. The scheme would benefit the Coimbatore and Trichinopoly Districts as well as the State. Since the Pattukkóttai Taluk would also benefit by it, there would be no necessity for carrying out the Káttár Reservoir project planned by Col. Smart

for the relief of that taluk. It was cheaper and better than the latter scheme, since the area commanded by it would be larger. It was also pointed out that, should the project be realised, the number of irrigation tanks in Karúr, Kulitalai, Pudukkóttai and Pattukkóttai might be augmented.

It soon became apparent that several of these schemes were impracticable. The Porundalore project was * "not likely to be undertaken in the near future" and the Bhaváni project, "if sanctioned" was "not likely to affect the State." The only practical scheme seemed to be the Cauvery Reservoir Project which Mr. Clay was engaged in investigating. In 1910, it was believed that if carried out it would command extensive areas in the Álangudi Taluk.

Hope next centred round the Méttur canal which "was first intended to pass through a portion of the Karambakkudi firka in the State. The probable area of the channel through the State was estimated at about 1,500 acres, and the extent of wet lands that would be brought under cultivation in the State at 8,000 acres. In the 1928 (March—April) session of the Legislative Council, the Dewan-President intimated that the Madras Government had decided not to take the canal through the State. He regretted that he was not in a position to publish all the correspondence relating to the history of the project, and could only say that the Madras Government had declined to comply with the Darbar's request that the ryots of the State, who might be benefited by the scheme, should be accorded the same terms as the British ryots. He hoped however that the Darbar would succeed in their efforts to induce the Madras Government to permit them to take off a channel of their own from the Méttur canal into the State. These efforts also failed, and to an interpellation at the session of the Council in November 1935 the Darbar, replied that the Madras Government had stated definitely that they could spare no water, and even if they could do so, the cost of the necessary works would be prohibitive.

* Political Agent's letter Dis. 278 of 8-7-07.

The following extract from the letter from the Secretary to the Government of Madras—Public Works and Labour Department—to the Agent to the Governor-General, Madras States, explains why.

"I am directed to say that there are only two ways of "supplying Cauvery water to the State, either by extending the "Kattalai High level channel or through the Ólaváyal and "Alivalam channels of the Grand Anicut canal. The Kattalai "High level channel is designed to carry supply just sufficient "for its ayacut, and if extra water is to be allowed through the "channel for the benefit of the Pudukkóttai State, it would not "only have to be extended by about 25 miles to reach the State "boundary, but would also have to be widened throughout its "length of 35 miles. The scheme is thus prohibitively costly. "As regards the supply through the Grand Anicut canal the "Government regret that as the entire area of 301,000 acres "allowed by the agreement with the Mysore Darbar has already "been delimited in British territory, it is not possible to include "any area in the State." The Darbar subsequently approached the Mysore Darbar on the subject informally but without success.

"*Railway-affecting*" *Tanks.*—There are a number of tanks that would endanger the safety of the permanent-way of the railway if they breached. A list was compiled of 108 such tanks in the proximity of the main line to Madura, of which 80 were State-owned and 22 private. A special Regulation was passed (VI of 1903 amended by Regulation I of 1922) to enforce the repairs of private Railway-affecting tanks. There are 41 "Railway-affecting" tanks in the State near the Trichinopoly—Mánamadurai chord line.

Administrative.—Up to February 1936, the minor irrigation tanks were under the control of the Dewan Peishkar, and major tanks under that of the State Engineer. As a measure of economy, and also (it is hoped) in the interests of efficiency, all have now been placed under the charge of the State Engineer. The normal annual expenditure of the Irrigation department is about a lakh of rupees, but in Fasli 1341, it went up to nearly two lakhs. The expenditure in Fasli 1344 was Rs. 1,62,440.

CHAPTER VI.

FORESTS AND PLANTATIONS.

Their nature and uses.—The 'Forests' of Pudukkóttai are purely "scrub jungle". According to the survey of 1813, they comprised 176 hill jungles (*malaikkádu*) and 145 timber forests (*perumarakkádu*). But these are no longer identifiable, since many of them have been destroyed, and others amalgamated. According to the report (1905) of Mr. E. D. M. Hooper, Conservator of Forests, Central Circle, Madras, who inspected the State forests and plantations, they were estimated to cover an area of 143 sq. miles, or 11·09 per cent of the whole territory. They are like other "porambokes" the absolute property of the State. Those maintained primarily as game preserves were treated as 'Reserved,' and the rest serving the people's needs such as pasture, green-leaf manure and firewood, as 'Unreserved.' This classification was not based on any principle, and in fasli 1339 (1929–30), the Darbar reclassified them as "Game preserves" and "Reserved forests." Densely wooded inner belts of such of the forests as have been maintained to be shot over by the Ruler or his guests and are closed to the public, are called "Game preserves." The rest including the outer belts surrounding the "Game preserves" are known as "Reserved forests." The area of the "Game preserves" is 32 sq. miles and that of the "Reserves" 68 sq. miles. A brief account of the State forests is given in Chapter II. Though not extensive, they are valuable and useful in many ways. In the first place, they furnish an unfailing supply of leaf manure. The catchment areas of several irrigation tanks lie within these forests. The Reserve forests contain plenty of game. They are also the breeding place of cattle allowed to run wild, chiefly bulls, sturdy types of which are captured. The forests yield plentiful supplies of *Ávάram* bark (*Cassia auriculata*), the fruit of the *Mambala konnai* (*Cassia fistula*) both useful as tanning material, *Etti*

(*Strychnos nux vomica*) and the bark of *Velvéla* (*Acacia leucophloea*) which is used in making Arrack. The trees are to some extent valuable as timber or as fuel. The local timber trees, the wood of which are used for planks, house-building or agricultural implements are the *Má (Mangifera indica)*, *Pila (Artocarpus integrifolia)*, *Vembu (Azadirachta indica)*, *Puvarasu (Thespesia populnea)*, *Vemmarai (Chloroxylon swietenia)*, *Iluppai (Bassia longifolia)*, and *Pterospermum* spp. Many other trees are useful as fuel—chiefly, *Usilai* (*Albizzia amara*). The plants on which the lac insect thrives are the *Purasu* or *Palásai* (*Butea frondosa*), Dalbergia spp. *Ilandai* (*Zizyphus jujuba*) and Ficus spp. Among cultivated plants it thrives best on *Tuvarai (Cajanus indicus)*. The lac resources of the State still await investigation.

Forest Conservancy.—The care and preservation of the forests were, till recent times, scarcely matters of public concern since their economic value was not properly realised. In the early times when the country was settled and colonised, it was doubtless considered the prime duty of a citizen to clear forest land in order to bring it under the plough. The forests were not completely destroyed however, since large tracts of forests were preserved as Royal hunting ground. Regular and systematic conservancy dates from 1870, when the care of the forests was consigned to a separate department. The main duty of the department was "to supply fuel for public works, and to issue permits to private individuals on payment of seigniorage for the removal of produce." The department still continues to cut fire-wood for sale to the public and supply to the departments of the State. The natural conditions of the State, climatic and otherwise, do not allow of cultural operations on a large scale.

While reorganising the department in Fasli 1339 (1929-30), the Darbar appointed a technically-qualified Ranger to advise the officers of the department. In Fasli 1340 (1930-31), the work of demarcating the Town kasba forests was taken in hand, and was completed in the next fasli. The kasba forests

(east and west) have been mapped with all their important topographical details, and, as surveyed, have an extent of 6,920 acres. Dibbling operations were undertaken every now and then. A Fordson Tractor for ploughing was bought in Fasli 1340 and in the same fasli, 60 measures of seeds of different varieties consisting of Virai (Hemicyclia sepiaria) Palai (Mimusops hexandra) Karuvai (Acacia spp.) and nuxvomica were collected and dibbled in the blank spaces of the several forests. Forest areas containing over-mature and stunted trees are marked out into coupes and sold in auction every year. To accelerate the natural regeneration of forests, the system of selling green leaves in blocks on a three year rotation was started.

Plantations.—In 1884, blank areas were first planted with casuarina in order 'to supplement the small supply of fuel and small timber.' Sir Sashia Sastriar opened a small plantation on the bank of the Vellár with 5,000 plants got from the farms in South Arcot and at the same time a nursery was started in the Residency gardens with 8,000 'younger transplants' also got from the same place. They were taken out after the first rains and added to the plantation at the Vellár. In 1889, there were in the Vellár plantation 104,500 trees old and young 'besides nurseries for future operations,' and another plantation was started near Perungalúr. In 1904, Mr. Hooper remarked, "the planting of this species has proved an unqualified success and the produce has sensibly reduced the strain on the State wastes in the vicinity of the plantations." Casuarina plantations were gradually extended to the jungles and wastes near Várappúr, Válaramánikkam, Kilànilai, Nedungudi, Pálaiyúr, Mirattunilai, Tirumayam, Vaittikoil, Vírakkudi, Peraiyúr, Kummangudi and Viràlimalai. When casuarina plantations came to be raised all over the State by private enterprise, the Government decided in 1923 to restrict the State plantations to what would be sufficient to meet the requirements of the State departments and to supplement the supply of fuel to the public from private sources. The plantations of Perungalúr, Várappúr and on the

Vellár, including the nurseries were last extended in 1931–32 and 1933–34.

This success with regard to casuarina led to similar experiments with other species under State control. Portions of wastes and jungles were converted into plantations of mango and cashew-nut trees. In 1926, 4,000 palmyra seeds were sown on the boundaries of Váráppúr and Perungalúr plantations and about the Vervembukádu Block No. 1. Tamarind was planted in a portion of the Kudumiamalai Reserve forest, and in 1928–29, 600 tamarind seedlings were planted in the Kavinád tope. In 1929–30, 500 more tamarind seedlings were planted. Fresh mango seedlings were planted in all fruit topes, and the Palmyra topes in Perungalúr and Kokkumári were extended. In 1932–33, the department opened a nursery for the grafting of mangoes and planted seedlings in the interspaces of several fruit topes. In 1908 Ceara rubber was imported and tried in Rangiam, but the experiment was not successful. Sandalwood seedlings were tried in 1918 with no better results. There are at present 25 plantations covering an area of over 6 sq. miles under the control of the department, consisting of Casuarina, Cashew, Mango and other fruit-bearing trees.

A list of the plantations, with, in some cases the area fit for planting and dibbling at the end of Fasli 1344 (1934–35) is given below.

No.	Name of Plantations.	Area fit for planting and dibbling.	No. of trees (given in round nos.)
1	Kokkumári plantations (mango, etc.) ...	...	1,600
2	Sivagnánapuram (mango, cocoanut, etc.) ...	...	1,000
3	Vellár West—Kavinád (palm, tamarind, etc.) ...	...	200
4	Vellár East (casuarina, etc.) }	51	30,000
5	Vellár New (cocoanut, mango, etc.) }		
6	Vellár (Nánal) ...	...	...
7	Mirattunilai (Casuarina, mango, etc.) ...	40	1,200
8	Do. Poonthope (mango, etc.) ...	...	1,300
9	Pálaiyúr (mango, etc.) ...	70·5	500
10	Kilánilai & Nedungudi (cocoanut & palmyra) ...	28	...

No.	Name of Plantations.		Area fit for planting and dibbling.	No. of trees (given in round nos.)
11	Vaittikoil (casuarina, mango)	...	94	4,500
12	Vírakkudi Do.			1,600
13	Perungalúr West (casuarina, etc.)	...	23	200,000
14	Perungalúr East			
15	Perungalúr New			
16	Pooram & Veeradi Pillayar (cashew)	...	...	...
17	Váráppúr West (casuarina, mango)	...	76	20,000
18	Váráppúr East			16,000
19	Malayur & Rasimangalam (cashew, etc.)	...	...	6,500
20	Váráppúr (tamarind)	...	...	10,000
21	Tirumayam East & West (Palmyra, casuarina, etc.)		70	20,000
22	Kudumiámalai (tamarind)	...	...	250
23	Annavásal Sarukkapattai (tamarind)	...	15	100
24	Sollapperumálpatti (tamarind)	...	...	400
25	Nedungudi (cocoanut palm, etc.)	...	...	600

Forest Revenue.—The very conception of Forest Revenue is modern. Before 1866, jungles that were not reserved for the hunt were termed *Karikkádu* (charcoal jungles) because they were considered to be fit only for fuel, and were accordingly let out on leases called *Karikkádu kuthagai.* In 1878-79, the demand under 'income from jungle,' as it was then called, was Rs. 653 of which Rs. 133 was actually realised.

The total demand for Fasli 1344 (1934-35) including an arrear of Rs. 626 was Rs. 37,201, and a sum of Rs. 35,546 was collected. The details of revenue collections for Fasli 1344 are shown below:—

I. *Reserve Forest*:—

		RS.	A.	P.
(a)	Timber	63	12	0
(b)	Fire-wood and charcoal...	1,199	12	6
(c)	Green leaves	2,362	4	6
(d)	Grazing fees	1,347	6	6
(e)	Miscellaneous	1,095	6	2
	Total ...	6,068	9	8

		Rs.	A.	P.
II. *Plantations :—*				
(a) Timber	...	474	8	7
(b) Fire-wood and charcoal... ...	...	6,337	9	3
(c) Fruit-bearing produce	...	827	9	4
(d) Cashew-nuts	...	565	0	0
Total	...	8,204	11	2
III. *Quarries :—*				
(a) Stone-mason license fees ...	...	6,916	0	0
(b) Monopoly and seigniorage fees ...	...	10,660	11	0
(c) Brick and Tile moulding license fees	...	887	4	0
Total Rs.	...	18,463	15	0
IV. *Miscellaneous :—*				
(a) Compounding fees	...	3,557	3	6
(b) Sale of wild animals	...	21	4	0
(c) Other receipts	...	137	8	1
Total Rs.	...	3,715	15	7

Grand Total about Rs. 36,500.

The Administration Report for fasli 1333 reported that there was an abundance of private fuel for sale that adversely affected the State revenue. Private traders and purchasers of trees in Government forests and tank bunds continued to flood the market with cheap fuel, and in 1344, the sale of fuel in the Government fuel depôt in the town was found to be so slack that in the hope of meeting this competition the Government had to reduce the price of casuarina fuel from Rs. 11 to Rs. 10 a ton and that of jungle fuel from Rs. 8 to Rs. 7 a ton for six months from October 1, 1934. The price was further reduced by one rupee a ton for both kinds of fuel from February 15, 1935, and with effect from May 1, 1936 to Rs. 8 per ton of casuarina fuel and Rs. 5 per ton of jungle fuel. Still the revenue of the Government continues to fall as the following figures will show.

Fasli.	Receipts under the sale of casuarina and jungle wood.
1343	Rs. 4,132
1344	Rs. 3,114
1345	Rs. 2,576

A detailed account of the quarries is given in Chapter I (pages 11-13). There are 143 granite quarries in the State, besides 44 others set apart exclusively for the Ooliamdars of the Tirugokarnam Devasthanam.

Administration.—The Forest department was first organised in 1870 and was placed under the supervision of the Dewan Peishkar and an amin. It was transferred to the control of the Superintendent, Salt, Abkari and Forests in July 1897. In September 1908 it was placed in charge of a special officer, Mr. H. O. Neill, a retired Extra Assistant Conservator of Forests in British service. The department was again amalgamated with the Salt and Abkari department in 1920. As a measure of retrenchment the post of Superintendent, Salt, Abkari and Forests was abolished with effect from February 1, 1936, and the departments under his charge were placed under the control of the Dewan Peishkar.

CHAPTER VII.

OCCUPATIONS AND TRADE.

Introductory.—The mineral and vegetable products of the country are not such as to afford materials for the establishment of any important art or industry. The State is known to possess high grade magnetic iron-ore; but apart from granite and laterite which are used as building material, the only minerals put to any industrial use are Fuller's earth, red ochre, and brown clay. Mica, alumina, amethyst and rock-crystal occur in small quantities, but have not yet been exploited commercially. The vegetable products are not of great commercial use except a few such as avárai (*cassia auriculata*), used in tanning and medicine.

In an inscription * dated 1299 A. D. of Jatávarman Víra Pándya III at Tiruvarangulam, reference is made to smitheries and to a kind of profession tax of three *kásu* levied on them. In the survey of 1813 also, mention is made of similar activities at Perungalúr, Várappúr, and Vallattirakóttai. There are still to be found on the outskirts of the Sengirai forest remains of a furnace, in which iron-ore must have once been smelted.

About the year 1878, Mr. Bruce Foote, in the course of his geological survey of the country, reported the discovery of a small outcrop of magnetic iron-ore on a ridge near Mallampatti and Amburapatti. In 1908, Mr. Alexander Primrose who was employed to explore the same area in order to determine its mineral potentialities found extensive deposits extending north and south near the two villages which are situated about twelve miles due south of Trichinopoly and eight miles from the nearest Railway stations of Tondamànnallur and Kumàramangalam on the Trichinopoly—Mànàmadura chord line of the South Indian Railway. The neighbourhood is mostly dry and roads run from

* திரு நந்தா விளக்கு இரண்டுக்கும் கொல்லர் ஊதுகிற உலைகளில் உலை ஒன்றுக்குக்கொன்றுமை காசு மூன்றாக உலை இரண்டுக்கு காசு ஆறாக.

it to the two Railway stations. Limestone is found at Súriyúr at a distance of two miles from the deposits at Mallampatti.

In 1934, the Darbar requested the Director-General of Commercial Intelligence and Statistics, Calcutta, to place them in touch with any firms or persons who were likely to be interested in working the iron-ore deposits. The Director-General was good enough to insert an inquiry on the subject in the "Indian Trade Journal" on behalf of the Darbar free of charge. Thereafter, a Calcutta firm approached the Darbar stating that they hoped to introduce an European firm which would work the deposits, and sent a representative to inspect them. The correspondence has so far yielded no practical result; and the same is true of enquiries addressed by the Darbar to other quarters including the South Indian Railway.

In the opinion of the Darbar, while the reduction of these ores on the spot by electricity might conceivably be a commercial proposition, it is highly improbable that it could pay to convey crude iron from Pudukkóttai by road and rail to Negapatam, Madras or any other Indian ports for export.

The Agent of the South Indian Railway stated in response to an enquiry made by the Darbar that there would be no difficulty in constructing a Branch line from Tondamàn-Nallur station to the site of the deposits under the "assisted siding terms." The Darbar are prepared to allow all reasonable facilities and assistance to enable any firm or person of standing with adequate financial resources and genuinely interested in the deposits to investigate their nature and extent. Their development might be of great benefit to the Darbar and the subjects of the State.

While inspecting the surroundings of the village of Ammayapatti in connection with the proposal to supply water to the town from the Vellàr, Mr. Westerdale expressed the opinion that the area was suitable for a cement factory since

lime nodules and clay occurred side by side. The Darbar are trying to secure expert advice in regard to the possibility of starting the manufacture of cement in the State.

In 1814, an indigo factory was started at Karambakkudi under the joint proprietorship of Mr. John Blackburn and the then ruler of the State. It must have been successful, for it led to the opening of a similar enterprise at Káraithope near the capital. Even now the curious observer may note the ruins of large vats and wells, constructed at Karambakkudi for this industry. Both the factories were soon closed. In the words of Mr. Pennington, "when he (John Blackburn) left India, he disposed of the business to the Rajah who thereafter carried it on as a kind of 'home farm' and put the proceeds (if there were any) into his private purse, but the undertaking seems to have met with considerable opposition from the first, and the ryots complained bitterly of being compelled to grow indigo, so that at last it was determined to close the factories and abandon the business during the early years of the present Rajah's minority about thirty years ago."

CHIEF OCCUPATIONS.

*The general distribution of the population of the State by occupation * is given in the following statement.*

Occupations of earners and working dependents.	Actual number.		
	Persons.	Males.	Females.
Total population ...	**4,00,694**	**1,91,134**	**2,09,560**
Non-working dependents ...	1,42,259	65,742	76,517
Total earners and working dependents.	2,58,435	1,25,392	1,33,043
1. **Agriculture and Cattle**	**1,31,433**	**86,047**	**45,386**
Cultivators	1,21,370	78,923	42,447
Shepherds	9,969	7,037	2,932
Others	94	87	7

* See Census Report 1931.

Occupations of earners and working dependents.	Actual number.		
	Persons.	Males.	Females.
2. **Industry**	**15,580**	**11,702**	**3,878**
Potters, washermen and barbers ...	5,496	2,898	2,598
Wood and metal workers ...	4,052	4,033	19
Building industry workers ...	2,597	2,356	241
Basket and thatch makers ...	785	330	455
Silk weavers	411	273	138
Toddy drawers	332	332	...
Butchers	321	279	42
Scavengers	238	125	113
Tailors	177	173	4
Shoe and sandal makers ...	139	139	...
Cotton weavers	133	102	31
Sawyers	87	87	...
Wool spinners and weavers ...	86	5	81
Other industries	726	570	156
3. **Transport**	**2,027**	**1,922**	**105**
Cart owners and drivers ...	1,052	1,049	3
Others	975	873	102
4. **Money Lenders**	**3,668**	**3,222**	**446**
5. **Trade**	**8,656**	**6,267**	**2,389**
Hotel-keepers and traders in food stuffs	5,459	3,583	1,876
Other traders	3,197	2,684	513
6. **Public administration including Police and Military forces**	**2,579**	**2,530**	**49**
7. **Professions and liberal arts** ...	**3,187**	**2,962**	**225**
8. **Service**	**89,884**	**10,001**	**79,883**
Domestic service	72,977	3,207	69,770
Labourers	16,907	6,794	10,113
9. **Others**	**1,421**	**739**	**682**

These figures show that roughly one-third of the population live by husbandry and allied occupations and another third by other occupations. The remaining third of the people are dependent on others for their support.

The Professions.—Besides a numerous body of State servants employed in the town and mofussil to carry on the administration of the State, and those engaged in the professions of law and teaching, there are a large number maintained and supported in the name of religion. In addition to the priestly Brahmin class who officiate at the performance of the numerous Hindu rites and ceremonies, there are the *archakars* and other servants employed to carry on the daily worship of the temples. Corresponding to these, are the *Labbais* among the Mohammedans, and parish priests and missionaries among the Indian Christians.

The artisan class.—Every fair-sized village has its usual complement of the artisan class. There are the village blacksmith making ploughshares, tyres for wheels, and bullock shoes; the village carpenter, the village potter, the village grocer and miscellaneous shopman, and the village barber-surgeon, whose wife is the village midwife.

Agriculture.—The main industry of the State is agriculture, as the Census figures quoted above show. The nature and conditions of the agricultural industry on which the population mainly subsists have been set forth in Chapter IV.

Pasturing.—There are two distinct types of graziers—the Idaiyans or cowherds who keep cows and trade in milk, curds, and ghee, and the Kurumbars who tend the wool-bearing Kurumba sheep. The latter occupation is practically negligible, since the local breed of sheep does not yield a heavy clip and wool weaving has not developed beyond primitive methods.

Weaving.—After agriculture, there are practically no industries worth mention, except, perhaps, weaving which is carried on principally at Tiruvappúr and Karambakkudi.

Tiruvappúr which is a suburb of the capital, is by far the most important centre. It contains about 150 families of Sowráshtras mostly devoted to weaving and dyeing silk for which they are eminently fitted by reason of natural skill and long

experience. There is a small settlement of their kinsfolk numbering at present about 40 families at Parambúr in the Kolattúr taluk, many of whom are reported to be giving up weaving as not remunerative. The women, however, still earn a pittance by doing some preparatory work for the Tiruvappúr looms, by way of spinning raw silk.

There are at present about 250 looms at Tiruvappúr, all engaged in weaving silk. Most of them are engaged in weaving *sáris* of 11 to 12 cubits long and 40 to 45 inches wide which are largely in demand among the Nattukkottai Chetties. About 15 looms manufacture *sáris* of 16 to 18 cubits long which are of the type woven at Kumbakónam, Kornád and Tanjore, while about 15 others weave cloths for bodices. The silk *sáris* woven are similar in pattern and get-up to those of Kumbakónam, and Bangalóre, and are embroidered with gold lace. A third kind of cloth is a check tartan known as "*kambáyam*" or "*kaili*," much used by Burmans and Mohammedans as waist-cloths. In colour and design it resembles the 'female' cloths of the country. Till recently it used to be made both in silk and cotton, and was exported largely to Ceylon, Burma and the Straits Settlements where it used to sell at from Rs. 5 to Rs. 50 a piece. But this industry has now ceased to flourish, owing, in all probability, to the dishonest use of mercerised cotton or 'imitation silk' which was passed off on the unwary as silk, and the loss of market consequent on the discovery of the fraud.

The Paraiyans of Karambakkudi are cotton-weavers. They make towels, *mundus* (coarse men's cloths), and *duppatties* (cotton-blankets) which are also used for purdahs.

The silk most favoured by the silk-weavers at Tiruvappúr is the Chinese variety of the brands 'Manji,' 'Kubin,' 'Lachoon,' 'Kuyin' and 'Hoyung' which they purchase from importing houses at Bombay and Kumbakónam. Some inferior silk is also obtained from Kollegál. Manji is fairly fine. The rest are

coarse and thick. In normal times, the price of silk varies from Rs. 10 to Rs. 15 a viss. French lace known as 'Louis' is purchased at Madura, Kumbakónam and Madras.

"The first preparatory process after the raw silk is obtained is the winding-off or sorting, after which it is twisted over spindles. The winding and twisting operations are done by women who are paid Rs. 2 for winding and Rs. 2 for twisting one viss of raw silk. There are 30 or 40 spindles in operation, and generally two filaments are twisted together to form threads for the warp or weft. Warping is done with a rotatory plant, and a warp is generally 55 to 60 cubits long, sufficient for 5 saris. Generally, winding of weft yarn is done by the women of the family, and if labourers are engaged, they are paid Rs. 2 for a warp of five sáris.

"The silk is then boiled off with soap, or with washing soda, or alkaline earth and bleached. A viss of unbleached silk,—120 tolas, when bleached will yield about 84 to 90 tolas of bleached silk. Silk is generally dyed with kiramanji or shellac to obtain fast red colour and with Kapila (*Mallotus philippinensis*) for organic colour. For other colours, aniline dyes are used. After dyeing, the skeins are dried and then wound-off, after which they are warped.

"The saris manufactured in this village are generally solid-bordered with designs and lace in the edges.

"Economics for weaving a warp.

	Rs.	A.	P.
Cost of raw silk (3 viss) at Rs. 27 a viss ...	81	0	0
One mark of lace at Rs. 40	40	0	0
Drawing and twisting charges, at Rs. 4 a viss ...	12	0	0
Dyeing charge	25	0	0
Warping charges at 8 as. a viss	1	8	0
Wages to the boy assistant	3	8	0
Total ...	163	0	0
Sáris sell at Rs. 35 each or ...	175	0	0
Net cooly ...	12	0	0

"This (the net cooly) varies up to Rs. 15 according to the price fetched in the market, and an average sári weaver is able to earn Rs. 15 a month regularly. The total outturn in the village per annum is worth Rs. 2 lakhs, including all kinds of fabrics, such as madis, and sáris of various dimensions. The total outturn in Parambúr is worth about Rs. 3,50,000."*

The value of the silk yarn purchased by the weavers of Tiruvappúr and Parambúr now approximate Rs. 19,300 and the present total out-turn of silk goods in both places amount to no more than Rs. 35,000. These figures show how the industry in the State is declining owing to the competition of cheap silk *saris* imported from Kumbakónam, Madura, Madras and Bangalore.

Handloom Weaving

Cotton Weaving.—Cotton weaving is carried on to a limited extent. Only the Panchamas weave coarse grey fabrics, such as, mundus, pillow cases, and women's cloths with a thin red border line.

"The names of villages wherein weaving of coarse cotton cloths is carried on are given below:—

Place.		Looms.	Families or houses.
Karambakkudi	...	3	100 houses.
Piláviduthi	...	3	10 or 12 families.
Rángiamviduthi	...	10	...
Pallavaránpathai	...	8	30 (f).
Pattividuthi	...	8	50 (f).
Semmattuviduthi	...	10	...
Sengapatti	...	some charkas.	40 (f).
Seniapatti	...	15	10 (h).
Kásavanur	...	5	...
Sítápatti	...	12	...
Mothapatti	...	6	...
Edayapatti	...	5	...
Velayagoundanpatti	...	2	...
Mínavelli	...	2	...

* Extracted from Mr. D. Narayana Rao's Report on the Cottage Industries in the State (1929).

"From the above statement it will be seen that weaving is confined to the neighbourhood of Karambakkudi, the north-eastern part of the State adjoining the Tanjore district, and to Virálimalai, the north-western corner adjoining the Trichinopoly district. The Panchamas say that they have been carrying on this industry from time immemorial and the occupation has been a hereditary one. But judging from the quality of work turned out by them it may be safely said that they have not been able to learn the art and acquire the skill. The weavers have been carrying on the weaving operations wfth their old primitive tools and implements and have not in the least been benefited by the instructions and demonstrations given in the Karambakkudi weaving school.

"Generally the warps prepared here vary from 28 yards to 60 yards and the distance to be travelled comes to a number of miles when we take into consideration the number of threads put in a warp which, of course, varies according to the width of the cloth woven. Even at Seniapatti where Padmasális carry on cotton weaving in medium counts, they are following this laborious and enervating practice. For preparing a warp the minimum number of coolies required is 4; sometimes even 6 are employed where they have to get longer warps. Each cooly, is paid one anna, and the preparation of an ordinary warp of 56 cubits takes very nearly 4 hours.

"Winding and sizing are done in the usual way. Warps are sized with Varagu ganji and combed in the streets. Panchamas invariably size their yarn not only before putting the warp on the loom but also after it is taken out of it. The weaving is loose, and to cover their defects they starch the woven cloth heavily. Drawing, winding, and sizing are done by the weavers themselves assisted by their family members."*

The Pudukkottai Weaving Factory, a limited concern, was opened in the capital in April 1936 by the Assistant Administrator. It has now 15 looms working to which 10 will shortly

* Extracted from Mr. D. Narayana Rao's Report.

be added. The establishment includes 9 expert weavers from Bhavàni, Tinnevelly and Madura, 6 local men and about 10 women coolies. The factory weaves dhotis, bed sheets, carpets, mercerised towels, etc. The warping mill makes warps up to 160 yards. The yarn is bleached and dyed, and border designs are printed in the factory. There are now 7 looms in Tiruvappúr which weave cotton saris to the approximate value of Rs. 2,000 a year.

Dyeing.—There are two distinct classes of dyers at Tiruvappúr, the silk-dyers and the sáyakárans or cloth dyers. The occupation of the latter is almost gone; but there is still so great a demand for dyed silk (since among Hindus only widows wear white) that every weaving family owns a set of dyeing vats and churning sticks with which to dye in an emergency, although ordinarily all the silk prepared for the loom is sent out to the expert dyer.

Among the various colours fixed by the dyers the favourite ones are red (Arakku) and yellow (Manjal).

Arakku Sáyam: Dyeing involves three distinct processes—*usiná* or bleaching, *káram pidikkirathu* or application of mordant, and dyeing proper. The prepared silk is first bleached by steeping it in a solution of Fuller's earth dissolved at $\frac{3}{16}$ of a seer for every seer of silk. During this process, the silk loses a fourth of its weight although this is made up later on when the colour is fixed.

The next stage is to rinse the silk in running water, and dip it in a mordant composed of alum and turmeric, mixed in the proportion of 2:1 and weighing about 3 rupees weight for every seer of silk.

The dye is ***kombarakku*** or stick lac, of which 3 seers are used for every seer of silk. The lac is broken into fragments and boiled in water, which is briskly stirred by means of a large wooden churn. The colouring matter which rises to the surface is at frequent intervals ladled into a separate cauldron. This is

said to be repeated seven times in order to make sure of the entire separation of the colouring substance. The contents of the cauldron are now boiled after adding some tamarind in the ratio of about $\frac{1}{8}$ seer for every seer of silk, and the silk is dipped in it and stirred for a couple of hours. The silk is finally washed and dried in the shade.

Manjal Sáyam: To dye yellow, two solutions are prepared of chunam (lime) and Fuller's earth, mixed in different proportions, namely, 3:8 and 3:48. The silk is first dipped in the solution containing the higher percentage of chunam, when it is immediately bleached, the loss of weight being about an eighth of the original weight. The other solution is mixed with a paste formed by kneading together gingelly (sesamum) oil ($\frac{3}{16}$ seer for 1 seer of silk) and *kapilá* (kamella) powder (*Mallotus philippinensis*) ($\frac{3}{4}$ seer), and to it the bleached silk is transferred to receive the colour. The mordant used is alum and the silk remains in the vats for a full day.

To dye green, the silk is bleached and washed as for *arakku sáyam*, and steeped in a mordant made of turmeric and gall-nuts (*Terminalia Chebula*) in the ratio of $\frac{1}{4}$ seer of turmeric, and 1 rupee weight of gall-nuts for a seer of silk. After dyeing with an aniline dye the silk is once again left immersed in another but stronger solution of gall-nuts.

To dye violet, rose, blue, etc., aniline dyes are used in preference to indigenous vegetable dyes which have fallen into disuse. The colours are fixed, even without using mordants.

Cotton-dyeing: Cotton-dyeing is of two kinds:—yarn-dyeing and cloth-dyeing. The first of these is not carried on here, the dyed yarn being purchased mostly from Kumbakónam and its neighbourhood. Tiruvappúr had more than a local reputation for cloth-dyeing, but unfortunately the art has now seriously declined. The so-called Tiruvappúr '*sáya véshtis*' or men's waist-cloths dyed in purple, for years competed successfully with the Madura brand of the same kind, and sold in considerable quantities all over the southern districts; but owing to causes

more or less obscure, the industry has nearly died out. The village is still inhabited by a few of the Náyakkans who originally carried on the business; and the following is a summary of the process they employ:—The cloth used for the purpose is piece-cloth known as *kachai* and *mull* cut up into pieces of 14 cubits to form a pair of men's cloths. It is first bleached by the Dhobie, and returned un-starched. The edges which are to receive the purple tint are dipped in a solution of gall-nuts. To form lines along the border, straight or curved according to taste, an iron style is used, with which lines are drawn along the outstretched cloth with molten wax, which penetrating the texture exclude any dye that may be applied at a later stage. The space between the wax lines is subsequently stained black by brushing it with a solution prepared by mixing together smithy ashes known as '*kittum*,' alum, turmeric and iron filings in which the cloth is to remain soaked for about 10 days.

The next process is to remove the wax, which is done, first, by beating the cloth while washing it in running water, and next, by immersing it in boiling water which melts and removes any wax that may still remain.

The cloth is now ready to receive the colour. Two solutions are prepared; one, a mordant made of gall-nuts; and the other a solution of a foreign aniline dye known as '*pipay sáyam.*' The cloth is alternately steeped in the two solutions a number of times and washed and dried at the end of each dip. The colour deepens as the process is repeated again and again. A faint colour known as *pál sáyam* is obtained by comparatively few immersions of this kind.

Vegetable dyes: The chief vegetable dyes produced in the State are turmeric, wild and ordinary, for yellow; *manjishti* or the Indian madder (*Rubia cardifolia*) for scarlet or coffeebrown; ventilago gall, for black; *kusumba* or bastard saffron (*Carthamus tinctorius*) for orange; *velvelan* or the bark of *Acacia leucophlœa* for red and black; and *vengai* or red sandalwood (*Pterocarpus santalinus*) for red.

The following particulars regarding the preparation and application of dyes are taken from notes prepared by the Curator of the State Museum in connection with the Exhibition of Indian Arts and Industries held in 1917—1918 at Madras.

"*Black dye.*—The cloth to be dyed is well washed in water mixed with some powdered sheep's dung. It is next steeped in an emulsion of castor-oil, alkaline earth and sheep's dung for 7 days and then washed in clean water. Then 1 tola of salt prepared from the ashes of the leaves of the Indigo plant (*Indigofera tinctoria*), 1 tola of Chlorate of Potash and ⅛ tola of Copper Sulphate are taken, and mixed in a solution prepared with gum arabic and left to settle for 4 hours. The water is then drained of the sediment and the cloth steeped in it for 7 days. It is next washed in clear water and dried. It is then soaked in salt water and after boiling till the boiling point, taken out, washed and dried. The colour is fast.

Orange dye.—The materials used for the dye are the root bark of Chay-root (*Oldenlandia umbellata*), and turmeric (*Curcuma longa*), with alum for mordant. The colour is fast but becomes darker when the cloth is bleached.

Yellow dye.—The materials used for the dye are the buds of Black Myrobolan (*Terminalia Chebula*) and turmeric (*Curcuma longa*). The colour is fast but becomes muddy when the cloth is bleached.

Red dye.—The dye is the root bark of *Ventilago Madraspatana* with alum for mordant. The colour is fast and stands washing.

Deep Red dye.—The materials used are red wood (*Adenanthera pavonina*), alum, sheep dung and alkaline earth as mordant."

Embroidery.—A word may be said in passing of the interesting industry of embroidery carried on by a few Mohammedan families in the town. The chief elements in this

form of decoration are gilt braid (*Thuyyá*), tinsel discs (*Jiginá*), and metallic tubes (*Poorni*) which are stitched on to silk and velvet in various designs. The material to be embroidered is stretched on a frame, placed on supports so as to be a few feet above the ground; the worker, usually a woman, squats on the floor and stitches by passing the needle from the left hand above the work to the right hand below. Embroidered cloth of this kind is used in making caps, badges, actors' costumes, and court dress.

Woollen spinning and weaving—This industry is carried on mostly by Kurumbas who are a pastoral and agricultural people owning land and flocks of sheep. They are found in the villages mentioned below, spinning wool and weaving cumblies as subsidiary occupations.

Village.	Approximate number of looms.
Puduvur	4
Nilayapatti	1
Vaithikoil	4
Puthámbur	10
Sellukudi	15
Mélúr	15
Váriyapatti	2
Kurumbapatti	3
Durvásapuram	1
Muttathanpatti	2
Satyamangalam, etc.	6

Sellukudi and Mélúr are the largest centres with 30 and 40 families. On an average, each house in these villages owns 100 to 200 sheep. In years of normal rainfall, the Kurumbas get two shearings of wool from their flocks. On an average the fleece of 10 to 15 sheep is sufficient for one cumbli measuring 6 cubits; and the yield of a sheep may be taken at ½ lb per shearing. The practice here is to weave this cumbli in two halves and then stich them together to make one big cumbli. Except the shearing of the wool, all other processes are carried

on by women during their spare time. From start to finish it takes one month to six weeks for a woman to prepare a cumbli. The actual weaving takes only three days.

The cumblies are woven on primitive looms similar to those employed in cumbli weaving in the Madras Presidency. There are no fly-shuttle looms anywhere.

In the manufacture of cumblies women take the leading part. They clean the wool by hand and tease it. After that they card the wool by means of a small handbow and spin the yarns either from pure grey or pure black or mixed wool. For sizing it tamarind seed starch is used. The wool is hand spun by the women on spindle, and cumblies woven from the yarn are thick and coarse. If the weavers were to use charkas they could produce finer yarn and a better class of cumbli.

Most of the cumblies manufactured are of grey wool. Very rarely pure black or pure white wool is used. Generally, a cumbli sells from Rs. 2 to Rs. 3 if grey, Rs. 4 to Rs. 4½ if pure black, and Rs. 6 if pure white. The production in all these villages is very small and the whole quantity is consumed locally. The average annual production per family does not exceed 4 to 6 cumblies, and these are sold either in Pudukkottai or in the neighbouring markets. The total production of the State may not exceed 500 cumblies a year.

Kurumba women weave purely as a subsidiary occupation in their spare time while the men tend the flock and shear the wool. The future of the industry depends on importing and acclimatising better breeds of wool-bearing sheep, and educating the unwilling Kurumba in better methods of spinning, carding and weaving, such as are practised in the Belláry and Kurnool districts of the Madras Presidency. The Darbar arranged with the Government of Madras in 1935 to secure at Darbar expense the services of some expert cumbli weavers from Kudithani in the Bellary District to teach the Kurumbars in the State improved methods in weaving. But the Kurumbars were unwilling to take advantage of this offer, nor did they respond

to the Darbar's proposal that rams should be imported from outside the State to improve the local breed. The good intentions of the Darbar were thus frustrated since the Kurumbars could not help themselves, and were not willing to accept such help as was offered. The Darbar have ordered that only locally-made cumblies should be bought by Government departments.

Mat Industry.—All castes, high and low, use the korai (*cyperus rotundas*) mat. It is the only bed that the poorer classes can afford. The making of such mats by hand is an agreeable home occupation, and the chief reason for its popularity is the inexpensiveness of the equipment that it requires. The industry has been practised on a fairly large scale in the villages mentioned below and the approximate number of looms at work are noted against each.

	Looms.
Kolandarámpatti	20
Surakkádu	3
Teethánviduthi	25
Annavásal	2
Káttáthi, etc.	6

In these villages korai does not grow, either wild or cultivated. The weavers in Kolandarámpatti, Teethánviduthi and Káttathi are Panchamas, while those at Annavásal are Mohammedan women and those at Surakkádu Pandárams. All the korai required for weaving is imported into the State from Trichinopoly and Tanjore. The workers, who are most of them agriculturists, carry on the industry as a subsidiary occupation. The thread for the warp is prepared from the fibre of aloe (*Agave americane*), which grows spontaneously in the State.

Except at Annavàsal, where the weavers are gosha women, the workers in all other places are men, and the industry is carried on purely as a subsidiary occupation. The mats are of fairly good quality and specially selected thin korai is generally used. To make them more attractive, they are dyed with red and black aniline dyes. The Pandáram weavers at Surakkádu are able to weave patterns in mats.

Chettiar women excel in making pretty little baskets of palmyra leaves which they give as wedding presents. These are seldom sold.

Apart from the korai-mat makers, there are a few classes of Kavarai Chetties and Koravans who make mats of the leaves of palmyra date palms, sometimes dyed with aniline dyes. The average wages that they earn range from 2 to 2½ annas *per diem.*

In Péraiyúr there are some Mélakáran families who are solely engaged in manufacturing fans out of palmyra leaves. Even this modest industry suffers by competition from Ramnad district where such articles are made in much larger quantities.

Basket making.—A few families of Shanars at Mirattunilai prepare baskets for household and agricultural purposes from palmyra leaves. The leaves are got free, but the cutting charges amount to Re. 1 per 1,000 leaves. Women alone do this work in their spare time. The leaves are used for the inner plaiting while the outer fibrous part of the leaves is used for the outer cover. These baskets are fairly strong and sell at from 2½ to 8 annas a basket according to their size. On every market day at Pudukkóttai a large number of such baskets are sold.

Rope-making.—The State is not wanting in fibre-yielding plants, though no use has as yet been made of them on a large scale. American aloe (*Agave americana*) or *kathalai* is found in plenty, and its long fibres measuring from 3 ft. to 7 ft. in length are used in making ropes, hammocks and twine. Deccan hemp (*Hibiscus cannabinus*) or *Pulichai keerai* yields a 'soft, white silk' which could be used for making ropes and sacks. There are also the madar or *Erukkan* (*Calatropis gigantea*), the sunn hemp (*Crotalaria juncea*), and *Marul* (*Sansaviera zeylanica*—bowstring hemp) from which good fibre can be extracted. But only cocoanut-fibre ropes are made in some quantity by the Koravars.

Bangle Industry.—This was one of the chief industries that flourished in the State till recently. It was a subsidiary occupation practised by the Gajulu Balijás. The chief centre

was Vaittúr (Kolattúr Taluk). Among the several causes that led to its decline are the difficulty in securing cheap fuel due to the conservation of the forests, and the popularity of the cheap and attractive bangles of foreign manufacture, which naturally have driven out the rude, less elegant and costly variety of the local make.

Only about five families in the State now make lac bangles, and the average production of each house does not exceed Rs. 20 a year. Lac bangles are made out of the refuse rejected by the dyer after extracting all the colouring substance from stick-lac in the process of fixing *arakku sáyam* (see under *dyeing*).

Metal Industry.—In spite of the serious inroads of the cheaper substitutes, such as enamelled iron, earthen, china and aluminium wares, there is still a demand for brass and bell-metal vessels. The custom of rich Chettiars, presenting large quantities of brassware to their daughters as part of their marriage dowry accounts for the establishment of this industry at Ponnamarávati, Pillamangalam, Alagápuri, and other centres. A statement showing the various places at which the industry is carried on with the number of families engaged and the kind of work done is given below:—

Name of village.		No. of families.		Kind of work done.
Kiranur	...	2 families	...	Bell-metal.
Alagápuri	...	1 factory	...	Brassware.
Kuppakudi	...	2 families	...	Bell-metal.
Álavayal	...	2 „	...	Brasswares.
Kandiyanattam	...	2 „	...	„
Koppanápatti	...	5 „	...	„
Valayapatti	...	1 factory	...	„
Kulipirai	...	2 workers	...	Bell-metal.

Bell-metal.—The monthly production of a family of workers is about 15 seers of worked metal. The local industry cannot however compete with the articles produced with better finish and at cheaper rates at Kumbakónam, Madura and other places.

Brass.—Manufacture of brass utensils is mostly carried on in factories owned by capitalists, where workers who belong to the Kammálan or Ásári caste are generally employed either on daily wages or on the piece-rate system, the latter being largely in vogue. The workers are mostly drawn from the Tinnevelly district. In each of the workshops, the annual turnover is worth a lakh of rupees and is almost wholly consumed by the Nagarathar community. It is not unusual for a rich Chettiar to order wares costing Rs. 5,000 for a wedding in his house. The copper and brass sheets required are brought from Madras. The chief centres of the industry are Koppanápatti, Valayapatti and Alagápuri.

Tin and lead vessels are made at Kíranur against orders.

Oil-pressing.—This industry is carried on to some extent in almost all important villages and towns in the State and especially at Álangudi and Karambakkudi. The seeds that are pressed for oil in the State are commonly gingelly, and groundnut. The out-turn of country *chekkus* (oil-mills) is almost the same everywhere varying from 32 to 35 per cent of the seeds pressed, but depends upon the quality of the seed.

Castor-oil is highly valued as a purgative. It is prepared in small quantities in almost every household. For this purpose, the castor seeds are sun-dried, broken, and boiled in water. After a time the oil separates and rises to the surface when it is skimmed into another vessel. Castor-oil was once commonly used as lamp oil, but now it has been practically superseded by kerosene oil.

The oil of the Nim or margosa tree (*Azadirachta indica*) is esteemed for its medicinal value. It is administered both externally and internally for nervous and other disorders. In spite of its disagreeable odour, it is used by the lower classes as hair oil, and in making unguents.

Other oils expressed in the State are *Iluppennai* or bassia oil (the oil of *Bassia longifolia*—the Mahua tree), used for temple illumination and adulterating ghee; *Punga ennai* or the oil of

Pongamia glabra—Indian Beech—used for medical and lighting purposes; and mustard oil, used as a liniment in cough and catarrh.

Though the State has thus plenty of oil-producing plants, no attempts have been made to make soap or candles, except *Savukkáram*, or country soap, which is obtained by boiling some cheap oil with Dhobies' earth, and solidifying the resulting compound in cocoanut shells. Oil cake is put to various uses. It is often used as manure. Gingelly cakes are used as fodder; and bassia cakes, as soap after an oil bath.

Perfumery.—Pudukkóttai has always enjoyed a reputation for scents, fine varieties of which were made in the past under court patronage by Brahmins and Mohammedans. Its *batties* (scented sticks) and *billais* (scented wafers) sell far and wide. The local perfumers also excel in making billai garlands glistening with beads and lace, and ornamented with figures of birds which sometimes fetch as much as Rs. 50 each. The recipes employed in making the perfumes are kept a close secret.

Brick-making and Pottery.—Reference has already been made to the fact that the soil being rich in red loam is eminently suited for brick-making. Flooring tiles and bricks of high quality are manufactured by the State P. W. D., and sold to the public when in excess of State requirements. Rough pottery is made by the *Kosavans* at Malaiyúr, Kosalákkudi, Tiruvéngavasal, Váráppúr and Sevalúr.

Stone-work.—The gneiss rocks of the State give occupation to considerable numbers of *kal-thatchans* or stone-masons. They quarry, dress and polish the stones. They also make articles of household use such as grinding stones, cattle troughs, mortars and pestles; and work as stone-masons. The more skilled among them sculpture gneiss and pot-stone figures of Gods.

House-building.—The steady expansion of the capital town, and the numerous works undertaken by the State and the Chettiars afford a steady support to a numerous class of artisans employed more or less directly in house-building. Foremost

among them are the masons, who build on contract and who are constantly consulted as versed in the '*manai sastram*' or Hindu science of architecture. There are brick-fields and lime-kilns all over the country, especially near the capital and the Chetty villages. House-building gives occupation to a large body of brick-layers, limeburners, and daily labourers, whose wages are steadily increasing.

Manufacture of Musical instruments.—Musical instruments such as the Veena, Thambura, Saranga, and Mrithangam, which were at one time made in the State earned a name for quality and finish. The industry is now practically defunct.

Fine Arts and Music.—The Rulers of the State have always been patrons of the arts, supporting in particular bards and poets who commemorated the exploits of the ruling family. Being situated near Tanjóre, Pudukkóttai offered a helping hand to the musicians who were left adrift on the downfall of the Tanjore dynasty. Veenai Subbukutti Aiyar, Sorabath Krishnaiyar, Desa Vádya Venkataràmiyar, Sarantha Náicker, Nánnu and Chittu whose names are well-known in the musical world, found favour and patronage at the Pudukkottai court.

The court also encouraged artists, some of whose paintings adorn the Darbar Hall in the Old Palace.

A certain amount of carving in wood and ivory is produced within the State mainly for the adornment of temple cars, or *váhanams*, and door-frames. Chettiars sometimes spend hundreds of rupees on elaborate door-frames for their houses.

PUBLIC UTILITY CONCERNS.

(1) Electricity.—There are two electric supply corporations in the State, one of which is situated in the capital itself and caters for the town lighting and industrial load. The other, the Sri Brahmavidyámbál Electric Supply Corporation Ltd., Rámachandrapuram, supplies the needs of a few rich Chetty villages such as Rámachandrapuram, Ráyavaram, Arimalam and Konápet,

(a) *The Pudukkottai Electric Supply Corporation Ltd.* was incorporated as a registered company on 1—3—1924. The scheme owed its early conception to the efforts of Mr. N. Vembu, M. A., A. M. I. E E., a native of this State, who was then in Germany apprenticed to the A. E. G. Berlin.

The foundation stone of the Power House was laid on the 20th February by Rao Bahadur P. K. Kunhunni Menon, the then Dewan of the State. The technical details were supervised by Mr. Seshasayee of Messrs. Seshasayee & Bros., Electrical Engineers, Trichinopoly. The installation was opened on 26—4—1928 by Rao Bahadur Kunhunni Menon.

At first there were only 30 house connections and no motor load. For the first two or three years the corporation had to fight its way and was not able to declare a dividend. The Darbar came to its help with a loan of Rs. 20,000, and the Municipality with a sum of Rs. 15,000.

The Corporation has been able, thanks to the increasing loads, to declare satisfactory dividends for the last 4 years. The Darbar have converted their loan into shares, and have the right to appoint a Director.

There are three Diesel engines supplying Alternating Current at 400 volts, three phase, 50 cycles—2 engines of 95 and one of 160 Horse Power. With the increase in load, a 6600 volts High Tension Feeder supply system has recently been inaugurated.

As illustrating the growth of load, a few figures may be given.

Year.	Units generated.	Gross income Rs.	Total connected load Motors.
1928	30,000	16,872	...
1930	60,000	25,488	25
1935	240,000	55,000	70

The number of house connections has now risen to 400. The Municipality is taking a large amount of power for street lighting and also for the motor pumps in the Town Water-Works.

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Three printing presses in the Town use motor drives. A flour mill and a coffee grinding mill are electrically driven. The New Palace and some other Government buildings have electric pumps which have also been installed by a few private persons. The two permanent cinemas in the capital also use electric energy.

(b) *The Sri Brahmavidyámbal Electric Supply Corporation Ltd., Rámachandrapuram.*

A few rich Chettiar families in Rámachandrapuram, more familiarly known as Kadiápatti, had installed private generating sets in their houses for lights and fans. A Limited Company was floated mainly due to the efforts of Dewan Bahadur T. N. Muthiah Chettiar and was registered on 25—7—1925. The foundation stone of the Power House was laid on 6—11—1925 by Dewan Bahadur T. N. Muthiah Chettiar. The first switching on of lights was done by Rajkumar Vijaya Raghunatha Dorai Raja, Regent of Pudukkottai on 4—3—1927.

In the year 1930, Konápet, 8 miles from the power station was supplied through a 6000 volts High Tension Feeder. Recently a further feeder at 6000 volts has been run to Arimalam, 8 miles distant on the eastern side.

There are two crude oil driven engine generator sets, each of 60 Horse Power supplying Alternating Current at 440 volts, 3 phase, 50 cycles. As part of the load is D. C. there are motor driven D. C. generators at a sub-station to supply the D. C. load at 110 volts. In 1935, 166 houses got energy from this power house. The unions at Rámachandrapuram, Ráyavaram, Konápet and Arimalam have electric lights. There are 15 motor driven pumps at various houses in these places.

Owing to insufficient demand for current, the corporation has been unable to declare a dividend so far.

These two corporations are inspected by the State Electrical Inspector.

(2) Rice mills and decorticators.—There are numerous power-driven mills all over the State for husking and polishing rice, eight of which are located in the capital itself. They are working busily from year's end to year's end, and in consequence a large number of poor people, especially women who formerly earned their livelihood by pounding rice, have been thrown out of employment. In the capital there are two flour and condiment mills, and one power-driven plant for grinding coffee seeds.

In centres of ground-nut cultivation such as Álangudi, decorticators have been installed.

(3) Printing-Presses.–There are six printing-presses in the Capital, of which the State Press is the largest. One of them is a flourishing co-operative concern. The others are privately owned and undertake job work and occasionally the printing and publication of books. The *Janamitran* and *Desaqoliyan* presses print the two Tamil weekly journals of the same name which are published in the State.

The State Press was established at Tirugókarnam in 1861 and named the Sri Brihadamba Press after the tutelary Goddess of the State and was removed to the Public Offices in 1892. In 1880 it was considerably enlarged and improved. A State Gazette was first published in 1879 as a bi-monthly, which was converted into a monthly in July 1881, and is now issued on the first and third Wednesdays of every month for the promulgation of State Orders and the dissemination of official and non-official information.

All Government publications, such as the annual Administration Reports of the State, Law Reports, Proceedings of the Legislative Council, the Pudukkottai Code and the State Regulations, and all Departmental Forms for use in the offices of the State are printed in the State Press. It publishes the State *Panchángam* (the Tamil calendar) which is sold in large numbers not only in the State, but also in the Tamil districts of the

Madras Presidency, the Pudukkottai College Magazine,—a quarterly conducted by the staff and students of the local College, and the College Calendar. It also undertakes job work of all kinds. The State Press is the only one in the State at which Sanskrit printing is done both in the Tamil-Granta and Dévanágari types. An electric motor has taken the place of the old oil-engine, and there are now in the Press 17 machines including the cutting, ruling and gumming machines. Attached to the Press is a Bindery. The Press employs 53 men. It is now one of the prominent printing-houses in South India.

Printing and Stationery constitute a separate State department under a Superintendent who is under the direct control of the Darbar. In 1920, the Stamp Department was transferred to the charge of the Superintendent of Stationery and Printing, and all State Judicial and Non-judicial stamps and stamped papers are manufactured in the State Press.

The receipts under Stationery and Printing for Fasli 1345 were Rs. 4,239 and the expenditure Rs. 45,733.

(4) Joint Stock Companies.—The number of Companies registered in the State up to the end of April 1936 was 27. Two of them are the Electric Supply Corporations in the Capital and at Rámachandrapuram. Another Electric Supply Corporation is being constituted at Ponnamarávati. The following companies do banking business in the State.

1. The Chettinád Corporation and Bank Ltd.
2. M. C. T. M. Banking Corporation Ltd.
3. The Pudukkottai Trading and Banking Corporation.
4. The Pudukkottai Branch of The Hindu Karur Bank.
5. Dewan Bahadur Subbiah Chettiar's Trading and Banking Co.
6. Ména, Chéna, Ména, Ména, Bank.
7. Janópakára Motor Service Company (Ponnamarávati).
8. The Sun Bank Ltd.
9. The Modern Bank Ltd. (Pillamangalam—Alagápuri).
10. The Branch of the Indo-Commercial Bank Ltd.
11. The Branch of the Travancore National Bank.

The following registered companies carry on industrial or trading business :—

1. The Pudukkottai Brick and Tile Manufactory.
2. Sri Murugan Company.
3. The Pudukkottai Trading and Banking Company.
4. Sambandam & Co.
5. Dewan Bahadur Subbiah Chettiar's Trading and Banking Company.
6. T. V. Sundaram Aiyangar & Sons.
7. South Indian Corporation Ltd.
8. The Pudukkottai Weaving Factory.
9. The Pudukkottai Match Factory.

Trade and Markets.—The products of the State, natural and industrial, leave no large surplus for export after meeting local demands. The country depends, on the contrary, on the surrounding districts for the supply of many necessaries. While, therefore, the exports are inappreciable, the imports are considerable. A brisk internal trade is carried on between one part of the State and another.

Exports : The chief articles of export are gneiss, red and yellow ochre, jack fruit, black and red gram, ground-nut and yams. *Avaram* bark, acacia bark, nux vomica seed and mangoes are also exported. Ground-nut is sent to Tanjore and Trichinopoly to be consigned to Europe. Mangoes and jack fruit sell largely in the Chetti parts of the Ramnad District. Gram is sold in Manappárai and Pattukkottai.

Imports : The principal articles of import are salt, paddy, straw, hardware, tobacco, timber, Calicut tiles and bricks, Cuddappah slabs, cotton and silk goods, petrol and kerosene oil. Bullocks and cows are imported from Manappárai and adjacent places in the Trichinopoly district; cocoanuts, keeths (plaited cocoanut leaves) and dried fish from Pattukkottai taluk of the Tanjore district, timber from Negapatam and plantain leaves, fruit and betel leaves from the adjoining Cauvery delta. Woven cloths for men and women are mostly obtained from Kumbakónam, Salem, Madura, Conjeevaram and Bangalore; and, in addition, piece goods are purchased from importing houses at Madras.

Internal trade is largely carried on at the *shandies* or markets, which are both collecting and distributing centres. The most important weekly *shandy* of the kind and probably one of the biggest in the Southern districts, is held on Friday at the capital. The *shandy* covers a large area, with numerous sections, roofed and open, set apart for paddy, cattle, *navadán-yams* (cereals and pulses), fish, straw, and vegetables. Hundreds of carts may be seen on Friday mornings streaming into the town from north, south, east and west along the principal highways, and a very busy trade is kept up the livelong day. This large volume of business is due, among other reasons, to the fact that the capital stands between the supplying districts of Trichinopoly and Tanjore to the north, and the rich consuming Chetty villages to the south. The Karambakkudi market which is next in size exchanges its produce with those of the Pattukkóttai taluk. The markets at Virálimalai and Konnaiyúr are also considerable. Below is given a list of markets and market days :—

Taluk	Station.	Market Day.
Álangudi ...	... Álangudi	... Thursday.
	Vadagádu	... Tuesday.
	Mullangurichi	... Monday.
	Maruthangoneviduthi	... Sunday.
	Vettanviduthi	... Saturday (Private).
	Varáppur	... Tuesday.
	Karambakkudi	... Wednesday.
	Pudukkottai	... Friday.
Tirumayam ...	... Konnaiyúr	... Monday.
	Pudupatti	... Wednesday.
	Panangudi	... Tuesday.
	Émbal	... Sunday.
	Konápet	... Tuesday.
	Melatháníyam	... Sunday.
	Ráyavaram	... Wednesday.
	Kulipirai	... Thursday.
	Viráchilai	... Sunday.
	Kílanilai	... Thursday.

Taluk.	Station.	Market Day.
Tirumayam—*cont.*	Kummangudi	... Saturday
	Rángiyam	... Saturday.
	Válaramanikkam	... Sunday.
	Irumbánádu	... Thursday.
	Nagarappatti	... Thursday.
	Arimalam	... Monday.
	Tirumayam	... Saturday.
	Ponnamarávati	... Saturday.
Kolattur ...	... Kíranúr	... Monday.
	Kudumiámalai	... Tuesday
	Kodumbálur	... Sunday.
	Perambur	... Tuesday.
	Virálimalai	... Monday.
	Killukottai	... Thursday.
	Puliyur	... Saturday.
	Annavásal	... Sunday.

Weights and Measures.—Since many of the inscriptions copied in the State relate to gifts of one kind or another described in some detail, a scrutiny of these records of the past reveals a bewildering multiplicity of weights and measures formerly current in the country. Some of these old world names have long been obsolete, but others are still familiar. The term *padi*, which is now so common, is discovered to be of comparatively recent origin. The measures of capacity that were current from the tenth century onwards were as follows :—

1 Śevidu	= a small measure containing 360 grains of Paddy.
5 Śevidus	= 1 Áḷákku (ollock) dry or liquid measure = ⅛ measure.
2 Áḷakkus	= 1 Uḷakku = ¼ measure.
2 Uḷakkus	= 1 Uri = ½ measure.
2 Uris	= 1 Náḷi = 1 measure = 1 Paḍi.
8 Náḷis or 8 Paḍis	= 1 Kuṟuṇi or Marakkál = modern Kalam $\frac{1}{12}$.
2 Kuṟuṇis or Marakkáls	= 1 Padakku.
2 Padakkus	= 1 Túṇi.
3 Túṇis	= 1 Kalam (also said to be equivalent to 4 Marakkals).

[Part II, S. I. I. Vol. II, (page 48), and E. I. XXIII, Part III, No. 17, (page 105). (Except Śeviḍu, all the other names are current)].

In an inscription of Sri Vallabha Déva of 1366 A. D., mention is made of the measure *kóttai* which is now said to be 21 marakkáls. In the Sáka—Samvat 1424, a marakkál called *kuramban* (=4 Nális) was in use in the Kadalísvara temple at Tirukalambúr. There were also numerous other measures named differently and current in different places, for example, Rajakéśari, Adavallán, etc. Sometimes they were named after the mark of standardization, e. g., *súlakkál*–the measure stamped with the *súlam* or trident, and used in Siva temples. Sometimes they were named after the metal of which they were made, e. g., *seppukkál* or copper measure. We do not know whether *kovilkál* was identical with *súlakkál*, but the name suggests that it was used in *kovil* or temple transactions. Similarly, *kadamaikkál* must have been used in levying *kadamai* (tax); while *úr* (town) *kál* and *Náttu* (country) *kál* probably denoted measures current in town and country respectively. Measures, it would appear, were also named after persons, probably eminent in their own time, e. g. *Rajakéśari*, *Ponmálikaipillai-Sanganeri-marakkál*, *Tiruvásaltirandán-kál*, *Virapari-pálamarakkál*, *Terrarai-kandan-kal*, etc. The practice of naming measures after persons has continued down to recent times. The indigenous measure called *Pallavan padi* is named after the Pallava kings, and Harris padi which was used till recently was named after a Collector of Tanjore.

The present grain measures are :—

4 Padis	=1 Marakkál.
12 Marakkáls	=1 Kalam.
5 Kalams	=1 Podi (pack-load).
50 Padis (Madras)	=1 Muttai.

The Imperial measure known as *Pattanam* or Madras *padi*, and the local *padi* called *Pudukkóttai padi*, *sinna padi* or *Pallavan padi* are used side by side. The former is $1\frac{9}{16}$ times the latter. Ghee (Liquid), oil, and curds are also measured by these standards. Ghee is sold by the weight in the bazaar, although in transactions with the peasantry it is invariably

measured. Milk is rarely weighed, though the expression 'seer' is used sometimes in connection with it. It is measured out with a vessel, which is supported to contain 1 seer by weight of milk. In measuring oil, larger measures are also employed *e.g.*, *áḍam* (=14½ Madras measures) and *podi* (=10 áḍams). Kerosene oil, is measured by bottle and tin, and arrack by gallon and dram.

Linear measures.—The standard of linear measure seems to have varied from place to place as may be inferred from such terms as *Mattiyúr-nila alavu kól* (Mattiyur land-measuring rod) *Tirumeyyam kól* (Tirumayam rod), *Ádanúr-káḍu alanta kól* (Ádanúr rod for measuring forest), *Sembáttúr-kaḍamai-irukkam kól* (Sembáttur rod for taxation), etc. The length of the rods are illustrated by the following table. The dates and places mentioned in the table are those of the inscriptions from which the information has been derived :—

A. D.		
1216	Kunnandār kōil	... 9 ft. rod.
1222 & 1271	Kudumiāmalai	... 16 ft. rod.
1227 & 1290	Pēraiyūr	... 18 ft. rod and 22 ft. rod.
1254 & 1261	Oliyamangalam	... 16 ft. rod.
1262	Mailapatti	... 18 ft. rod.
1311	Maravāmadurai	... 16 ft. rod.
1313	Perumānādu	... 16 ft. rod.
1322	Pinnangudi	... 16 ft. rod.
1340	Tirumayam	... 12 ft. rod.
1369	Mēlūr	... 12 ft. rod.
1841	Mirattunilai	... 24 ft. rod.

In the inscriptions of Máravarman Sundara Pándya I frequent reference is made to a measure called *kól kuditángi* which though unidentifiable now was well-recognised in the first half of the 13th century. A Kudumiámalai inscription dated 1267 A. D. mentions a *kaittadi* (Hand stick, short stick) whose dimensions are uncertain.

Two kinds of *kóls* (rods) are now recognised among the peasantry, a *kól* of 16 human feet in the eastern half of the State, and one of 14 ft. in the western. Though terms such as 'mile,' 'yard' (Tamil, *gajam*) and 'foot' (Tamil, *adi*) have passed into

the vernacular, the English linear measure of distance is not universally known. Short lengths are expressed in terms of the following table :—

8 Torai	=	1 Virakkaḍai.
12 Virakkadais	=	1 Sāṇ (span).
2 Sāṇs	=	1 Muḷam (cubit).
2 Muḷams	=	1 Gajam (yard).
2 Gajams	=	1 Bāham (fathom) (S. I. I. Vol. II, Part V, Page 10).

Báham, in the above table, represents the length between the tips of the two outstretched arms. Greater lengths, especially distances covered by journeys are expressed in terms of *náli* or the Indian hour of 24 minutes. Thus an English mile is *mukál-náli vali* or distance traversed in three-fourths of an Indian hour. A *kádam* is 10 *náli vali* or distance covered in 10 *nális* or 4 hours. Distances are sometimes indicated roughly by such terms as *kúppidu dúram* (distance within ear shot).

Square measures.—In former times the usual units of land measurement were *má, káni, muntirikai*, and their sub-multiples such as *kil muntirikai*, etc. They naturally varied with the standard rod of various localities. *Má* usually represented 256 *kulis*, though in one of the inscriptions at Tirugókarnam ascribed to one Mára Varman Víra-Pandya, a *má* is said to be 512 *kulis*.* In those days, lands were measured with so much care "that even such a small fraction as $\frac{1}{102400}$ of a *véli* † (=1 *kil-muntirikai*) was recorded in the documents. In one of the inscriptions of Irumbánádu temple, a certain land which was endowed to the temple, is said to have consisted of 83 small plots—some measuring so small a fraction as $\frac{1}{320}$ of a *véli*. In an inscription of an unidentified Jatávarman Sundara Pándya, mention is made of a grant of $\frac{3}{320}$ of a *véli* of land by the temple authorities of Ádanúr.§

* Kuli is variously defined as 12 sq. ft. of land measure, or a land measure varying in different places from 144 square feet to 576 square feet [Tamil Lexicon].

† Vēli-modern equivalent 6·74 acres.

§ Mā, kāṇi, munthiri, etc., are fractions (mā = $\frac{1}{20}$, kāṇi = $\frac{1}{80}$, munthiri = $\frac{1}{320}$) of a bigger standard square (probably the vēli). See inscriptions Nos. 89 and 90.

Even to-day, when lands have been measured by acres and cents, the old names continue to be used, of which the following is a table:—

100 Kulis (33·7 cents)	=	1 Mā (33·7 cents).
20 Mās or 2,000 kulis	=	1 Vēli (6·74 acres).
50 Kulis	=	1 Ál Nadukai (as much as could be transplanted by one man = 16·85 cents).
1,000 Kulis	=	1 Ál Sēvidam (unit of feudal tenure) (337 cents = 3·37 acres or ½ vēli).
500 Kulis	=	1 Kurukkam (168·5 cents or ¼ vēli).

A *kuli* is generally a square *kól* of 14 feet. The term *pangu* is rarely used.

Measurement of time.—Time was roughly calculated by observing the lengths of shadows, and noting the position of the sun and the stars. The village watchman in charge of sluices who has to irrigate fields by the hour, calculates by shadows at day and stars at night. In olden times a floating náḻikai vaṭṭil or clepsydra was used, i. e., a perforated vessel which was regulated so as to sink in a fixed time as the water entered it. Sun-dials (náḻikai vaṭṭam) were also in use. Time is roughly denoted by such expressions as *Velli mulaikirathu* (the east has brightened), *Uchchikkálam* (the sun is at *Uchchi* or Zenith), *Nisi* (Mid-night), etc. Subjoined is the table of time measurement:—

60 Vinādis	=	1 Nāḻikai (24 minutes).
2½ Nāḻikais	=	1 hour.
3¾ Nālis	=	1 Muhúrtam (1½ hours).
2 Muhúrtams	=	1 Jāmam (3 hours).
60 Nāḻikais	=	1 day (24 hours).

Commercial weights.—All solids except grain and salt are weighed according to the following table:—

3 Tolas	=	1 Palam.
8 Palams	=	1 Seer.
5 Seers	=	1 Viss.
8 Visses	=	1 Maund.
26⅔ Seers	=	1 Tulām.

An indigenous steelyard called *Tulákkól* is sometimes used to weigh yams and other vegetables.

Goldsmith's weights.—The Goldsmith's weights are:—

32 Kundu (*Abrus precatorius*) seeds	= 1 Virāhanidai.
8 Paṇavidais	= 1 Virāhanidai.
10 Virāhanidais	= 1 Palam (3 tolas).
8 Palams	= 1 Seer or 24 tolas.

Precious stones are weighed according to the following table:—

10	Manjadis	= 1 Virāhanidai.
$17\frac{3}{8}\frac{5}{2}$	Carats	= 1 Virāhanidai.
20	Radis	= 1 Virāhanidai.
$1\frac{1}{4}$	Kālanjis	= 1 Virāhanidai

The older system of weights for precious metals was as follows:—

1 Kunṛi	= 2 Grains.
1 Manjaḍi	= 2 Kunṛis (4 grains).
1 Kaḷanju	= 20 Manjaḍis (S. I. I. Vol. II, Part I, page 8).

Coins.—In the earliest Chóla inscriptions most of the gifts of money are expressed in terms of ***tulai pon*** (bored gold) identifiable by a punch hole at the centre, which was a sort of hall-mark of the genuineness or fineness of the gold used. Since the weights of the coins varied considerably with the locality, the weights were always mentioned as well as the number. The following names of coins are met with in the inscriptions:—*tiram palankásu*, *pudukkásu*, *Irási-panam*, *Varáhan-panam*, *Pancha-salákaiachchu*, *Víra Pándyankásu*, *Kuligai-panam*, *Senpaka-kulikai panam*, *Válál-vali-tirandán-kulisai panam*, *Sólankásu*, *Aráyirakatti-panam*, *Sirri-rási-panam*, *Sakkara-panam*, *Madirai Sakkara-pon*, *Káli-pon and Tirugókarnam-minnalpanam.*

A word about the first of these names. The ancient coins which were supposed to be the equivalent of a drachma called in Tamil *diram*, *diramam* and *diramám*,* were largely in circulation

* Tamil inscriptions give direct evidence on the point when they state that the Roman denarius and drachma had been in use in Southern India. "All these debased coins follow the weight standard of their Sassanian originals, which represented the Attic drachma of 67·5 grains, and in the inscriptions they are actually called 'drammas'" (திரமா or திரமம் in Tamil)–Brown: 'The coins in India.'

in the 12th and 13th centuries. One of the inscriptions of Kulótunga I refers to an arrangement for contribution to the Kudumiámalai temple in *tiramam*.

British Indian coins are now in use in the State. The only vernacular term for a coin current locally in the State and surrounding districts is *panam* which means $\frac{1}{8}$ of a rupee. A small coin called the Amman kásu is minted and issued by the State. Formerly twenty kásús made an anna. The Amman kásu though issued as current coin, wås not freely accepted as legal tender. But now, in pursuance of a Government order issued recently, the value of the kásu has been raised from $\frac{1}{20}$ of an anna to $\frac{1}{12}$ of an anna (equal to a pie), and the kásu has become legal tender and is even accepted by the British Post Offices in the State in the place of the 'pie.' It bears on one side the name 'Vijaya' in Telugu, and on the other side the figure of the Goddess at Tirugókarnam. These coins are issued every year during Navarátri for distribution to Brahmins.

CHAPTER VIII.

MEANS OF COMMUNICATION.

Introductory.—In that great classic *Silappadikáram*, mention is made of a road from Madura to Woriyur on which lay Kodumbálúr, now an insignificant hamlet of Kolattúr Taluk, but once apparently a large fortified town with more than one important temple. In subsequent times, Pudukkóttai lay on the way of the pilgrim bound to Rámésvaram from the North. Consequently, the trunk roads from Tanjore and Trichinopoly on the one side, and those leading to Madura and Rámésvaram on the other are the oldest, as they are still the most important, in the State. The numerous chattrams and water *pandáls* on these roads testify to their former importance.

Travelling in the Past.—When the old road *ooliem* or corvee (now abolished) was enforced, some care was bestowed on roads, though most of them were what we should now call fair-weather roads, passable, no doubt, in dry weather, in spite of ruts and holes, but almost impassable during the rains. There were practically no bridges or culverts across the rivers or streams which are torrents during and after very heavy rain but sandy wastes at other times. Under such conditions travelling was slow and tedious. It was generally performed in short stages of about 10 to 20 miles a day, undertaken at nights, or in the cool hours of the morning and evening. A journey from Pudukkóttai to Trichinopoly, for instance, involved three or four stages. It was broken at Rengammálchatram, Ammá-chatram, Nallúr and Máttúr where the wayfarer could find food and lodging at the chattrams (rest-houses) maintaind by the State or by private charity.

The inconveniences resulting from overturned carts and broken axles were less serious than the perils arising from robbers who infested the principal highways. There were

the notorious places such as *Ottaiyál* (on the Tanjore Road), and *Tháli Aruppá puli* (on the Trichinopoly Road, so called from the large number of *thális* or wedding necklaces wrenched from female travellers) where highway robbery was frequently committed. For mutual protection the carts in which the travellers journeyed were driven one behind the other in a long train, and the drivers armed themselves with stout sticks.

Since the State rivers are intermittent and dry for most of the year, there is no water-borne traffic of any kind. Formerly goods were generally conveyed in country carts, on pack-bullocks, or by headloads. A large proportion of the commodities brought to the markets for sale came in headloads, and here and there by the roadside one may see resting-stones called *sumaithángi · kallu,* formed of two or more upright stones supporting others laid horizontally on to which the headload was shifted for a while to ease the carrier of his or her burden.

The conditions of passenger traffic improved towards the close of the last century. The first improvement were the metalling, widening and proper maintenance of the principal roads, especially those leading to Trichinopoly, Tanjore, and Madura, opening Police stations, and organising road patrols. Meanwhile, private enterprise introduced services of light spring vehicles known as '*tapálvandis*' (post-carts) or *jutkas* built to carry four or five passengers which ran regularly along the highways, completing the journey to the principal outlying towns in a few hours by maintaining suitable relays of horses at convenient stages. The poorer classes found a cheap conveyance in the carts carrying goods traffic on these roads, in which on payment of a few annas they were carried as far as the carts themselves went. It was about the year 1910 that arrangements were first made to run a motor car between Trichinopoly and Pudukkóttai. This was followed by other cars running to Tanjore and Arantángi and back,

Motor buses now ply between the following places:—

1. Pudukkóttai and Trichinopoly via Kíranúr.
2. Pudukkóttai—Annavásal—Iluppúr—Virálimalai—Manappárai—Trichinopoly.
3. Pudukkóttai and Tanjore.
4. Pudukkóttai and Arantángi.
5. Pudukkóttai and Karambakkudi via Álangudi.
6. Pudukkóttai and Karambakkudi via Malayúr.
7. Pudukkóttai and Vadakádu via Álangudi.
8. Pudukkóttai and Káraikkudi via Kónápet.
9. Pudukkóttai and Káraikkudi via Tirumayam.
10. Pudukkóttai—Konápet—P. Alagápuri.
11. Pudukkóttai—Annavasal—Kíranúr—Andakkulam.
12. Pudukkóttai and Yémbal via Arimalam.
13. Pudukkóttai and Arimalam via Rámachandrapuram and Ráyavaram.
14. Pudukkóttai and Káraikkudi via Arimalam, Kílánilai and Kandanúr.
15. Pudukkóttai and Ponnamarávati via Kulipirai.
16. Pudukkóttai and Ponnamarávati via Káraiyúr.

There are about 90 buses, and a number of taxicabs plying on these roads.

Roads and their extension.—In the Olugu survey of 1813 some 19 roads are mentioned including those connecting the town with Kudumiámalai, Virálimalai, Tanjore, Kíranúr, Tiruppattúr, and Madura. They seem to have fallen into decay by 1854, but to have been repaired by 1856 when Mr. R. D. Parker, the Political Agent at Madura wrote,—"An improvement in the roads of this Territory is very marked. That from the Boundary of Madura to Pudukkóttai is in excellent order, as is also its continuation to the Tanjore Frontier." But in subsequent years the communications were neglected, so that Mr. Pennington, writing in 1875, while drawing attention to the broad roads, substantial bridges, and 'fine avenues,' also regretted that the bridges were "only monuments of departed glory no longer of any use to the traveller." But "owing to the critical state of the finances" of the period, nothing was done for some years to improve matters.

The last twenty years of the last century, however, saw marked progress in road making and maintenance. The three Trunk roads leading to Trichinopoly, Tanjore, and Madura were the first to receive attention. They were provided with bridges and culverts, and otherwise made thoroughly "traversable in all seasons." An agreement was entered into by which the British section of the Trichinopoly Road (about 8 miles beyond Màttúr at the Frontier) came to be maintained by the State, the Trichinopoly District authorities defraying the expenses. This arrangement ceased in 1901-02, when traffic had become specially heavy owing to the location at the British terminus of a Camp for the detention of Boer prisoners of war. 'Mile' coolies were always stationed along the roads to give immediate attention to patch repairs as necessity arose. From 1895 onwards wells were sunk by the roadside to supply water for repairs; and fruit-bearing avenue trees, the produce of which, it was hoped, would form a substantial contribution towards the cost of maintaining the roads, were planted.

The general scheme of roads is worth attention. As the reader already knows, the State is a purely inland one. The nearest point on the coast is about 12 miles from the State boundary. It is thus surrounded on all sides by British Territory. Three District headquarters, viz., Trichinopoly, Tanjore, and Madura lie at distances ranging from 30 to 50 miles. Before 1929, two lines of the South Indian Railway ran outside and not far from the State, the main line on the north, and the Arantángi Branch on the east; nine Railway stations lay within more or less easy reach; and since no railway then passed through the State the accepted policy was to link the capital with these stations by means of roads radiating from the capital. There were also two important roads that did not lead to any Railway station, those from Pudukkóttai to Ponnamarávati in the south-west and Yémbal in the south-east corner of the State.

A glance at the State map will show how from the capital which lies almost in the centre of the State, roads radiate in all directions while these are connected by numerous cross-roads. There are feeder roads to all the eight Railway Stations within the State.

The following statement compares the length of roads in the State with that in the adjoining British districts absolutely and in relation to the repective areas:—

District.	Area in square miles.	Length of roads.			Mileage per 100 square miles of area.			Remarks.
		Metalled or gravelled.	Unmetalled.	Total.	Metalled or gravelled.	Unmetalled.	Total.	
1. Pudukkóttai ...	1,179	485	70	555	41·1	6·0	47·1	
2. Tanjore ...	3,742	399	985	1,384	10·7	26·3	37·0	Figures for 1934—35.
3. Rámnád ...	4,819	637	203	840	13·2	4·2	17·4	
4. Trichinopoly ...	4,314	946	344	1,290	21·9	8·0	29·9	
5. Madura ...	4,912	880	439	1,319	17·9	9·0	26·9	

It will be observed from the above table that the mileage of metalled or gravelled roads that is, of motorable roads per 100 square miles in the State is more than double the corresponding figure in any of these districts except Trichinopoly and almost double the figure for that District while the figure for all classes of roads is very much higher than in any of the districts. Apart from this, since the soil is generally gravelly or sandy, and the subsoil frequently rocky even motor cars and, still more easily, bullock carts can traverse many hundreds of miles of cart-tracks, on the maintenance of which no expense is incurred, in all parts of the State, in practically all weathers. In spite of these incontestable facts there is a constant clamour for more regular roads and for expenditure on cart-tracks which can only be described as unreasonable.

The expenditure on roads was Rs. 1,77,780 in fasli 1344 and Rs. 1,09,831 in fasli 1345. A subvention of Rs. 17,615 was received in fasli 1345 from the Road Development Fund of the Government of India, and is being applied to the improvement of some of the more important roads in the State.

The following is a list of the roads in the State—

Mileage. Miles.	Mileage. Furlongs.	No.	Name of Road.
24	2	1.	Trichinopoly Road.
20	4	2.	Bùdalùr Road.
17	7	3.	Tanjore Road.
23	6	4.	Pudukkòttai—Álangudi—Karambakkudi Road.
2	0		(*a*) Tiruvarangulam on Road No. 4 to Pùvarasakudi.
10	3	5.	Arantàngi Road.
4	0		(*a*) Pùvarasakudi on Road No. 5 to Road No. 6
28	3	6.	Yèmbal Road.
3	0		(*a*) Thànjùr Road.
			(*b*) Road from Vàlaramànikkam to Arantàngi.
18	4	7.	Madura Road via Pillamangalam.
21	2	8.	Namanasamudram—Vèndampatti Road.
2	0		(*a*) Road from No. 8 to Pèraiyùr.
3	0		(*b*) Road from No. 8 to Kunnakudipatti.
1	6		(*c*) Nachàndùpatti on Road No. 8 to Road No. 29.
1	0		(*d*) Road from No. 8 to Malayakòil.
			(*e*) Road from No. 8 to Olagampatti.
30	3	9.	Manappàrai Road.
			(*a*) Road from Usilampatti on Road No. 9 to Madura.
27	7	10.	South Kolattùr Road.
0	6		(*a*) Sittannavàsal Road.
			(*b*) Trichy to Madura through Viràlimalai and Viràlùr.
13	4	11.	Illuppùr—Trichinopoly Road.
15	0	12.	Kíranùr—Ádanakkòttai Road.
15	3	13.	Vadavàlam—Puduppatti Road.
12	0	14.	Ádanakkòttai—Álangudi Road.
10	1	15.	Álangudi—Arimalam Road.
11	0	16.	Arimalam—Tirumayam Road.

Mileage. Miles.	Furlongs.	No.	Name of Road.
9	3	17.	Malakkudipatti—Kònàpet—Nèmathàmpatti—Tirumayam Road.
12	6	18.	Perumánádu—Konnaiyùr Road.
1	0		(a) Kumaramalai Road.
8	4	19.	Annavàsal—Kolattùr Road.
15	6	20.	Viràlimalai—Kalamàvur Road.
11	7	21.	Kàraiyùr—Oliamangalam Road.
1	0		(a) Maravàmadurai Road.
2	0		(b) Kílathàniyam Road.
12	2	22.	Kiranùr—Killukòttai Road.
4	3	23.	Vellanùr—Puthàmbùr Road.
1	5	24.	Tiruvèngaivàsal Road.
5	3	25.	Nàrttàmalai—Uppiliàkkudi Road.
4	0	26.	Perungalùr—Vàràppùr Road.
11	1	27.	Manippallam Road.
9	1	28.	Vengadakulam Road.
5	0	29.	Pilivalam—Viràchilai Road.
4	0		(a) Road from Tirumayam to Road No. 29 through Latchmipuram.
2	0		(b) Viràchilai—Panayapatti.
4	7	30.	Pilivalam—Sengirai Road.
6	7	31.	Nedungudi Road (Puduppatti—Tirumayam).
0	6		(a) Road from Agavayal (Puduppatti) towards Arantàngi.
5	7	32.	Arimalam—Kothamangalam Road.
2	1	33.	Vèndampatti—Vàrpet Road.
4	0	34.	Vèndampatti—Tirukkalambùr Road.
2	3	35.	Ponnamaràvati—Pùlàngurichi Road.
1	4	36.	Ponnamaràvati—Kattayàndipatti Road.
2	1	37.	Vèguppatti Road.
2	1	38.	Álavayal Road.
3	0	39.	Alagàpuri Road.
8	4	40.	Karambakkudi—Raghunàthapuram Road.
			(a) Maruthànkonviduthi on Road No. 40 to Pattukkòttai.
9	1	41.	Kòttaikkàdu Road.
3	5	42.	Puduvàyal Road.
1	3	43.	Pallathùr Road.
4	2	44.	Naivàsalpatti Road.

Mileage. Miles.	Furlongs.	No.	Name of Road.
3	8	45.	Panayappatti—Ràngiam Road.
			(a) Road from Ràngiam to Pùlànkurichi through Mudalipatti, Tirukkàlakkudi.
2	0		(b) Road from Ràngiam to Kurivikondànpatti.
4	5	46.	Annavàsal—Kudumiàmalai Road.
6	4	47.	Viràlimalai—Rasàlipatti Road.
8	6	48.	Álangudi—Vadagàdu Road.
1	0	49.	Sùranviduthi Road.
1	4	50.	Maruppini Road.
2	6	51.	Puliyùr—Kannankudi Road.
		52.	Road from Odappaviduthi to Tanjore via Kilànkàdu.
		53.	Branch Road called Karambaviduthi Road.
6	0	54.	Road from No. 1 Trichinopoly Road to Nànguppatti via Odukkùr.
0	1	55.	Road from No. 3 Tanjore Road to Chinniàchatram.
1	0	56.	Road from No. 7 Madura Road to Mèlùr.
2	0	57.	Road from No. 7 Madura Road to Tholayànur.
1	0	58.	Road from No. 8 Namanasamudram—Vèndampatti Road to Kòttùr.
2	0	59.	Road from No. 13 Vadavàlam—Puduppatti Road to Chettiyàpatti.

Upkeep of Roads.—It is generally speaking easy to make and maintain roads in the State. Gneiss or laterite metal or gravel are never far distant. Spreading of materials apart from mere patch work can only be undertaken during or after wet weather.

List of important bridges in the State.

No.	Name.	Situation.	Approximate cost.	Remarks.
1	The Vellàr Bridge on Tirumayam Road.	5th mile on Road No. 7.	Rs. 60,000	A Girder Bridge of 9 spans of 30 ft. each and 2 of 25 ft. each. Opened by Mrs. Burn in September 1922.
2	The Vellàr Bridge on Alangudi—Arimalam Road.	9th mile on Road No. 15.	40,000	(Under construction) A Girder Bridge of 11 spans of 34 ft. each.
3	The Pámbár Bridge on Tirumayam Road.	12th mile on Road No. 7.	...	......

No.	Name.	Situation.	Approximate cost.	Remarks.
			Rs.	
4	The Pámbár Bridge on Nedungudi Road near Kílánilai Fort.	19th mile on Road No. 31.	41,000	A masonry arched Bridge of 5 spans of 36 ft. each.
5	"The Márthánda Bridge"—over the Pámbár on Yémbal Road near Válaramánikkam.	19th mile on Road No. 6.	22,000	A Girder Bridge of 7 spans of 34 ft. each. Opened by Sir A. Tottenham on February 4, 1936.
6	The Kundár Bridge on Tirumayam Road.	3rd mile on Road No. 7.	...	......
7	The Kundár Bridge on Yémbal Road.	3rd mile on Road No. 6.	6,000	A masonry arched bridge of 3 spans of 24 ft. each.
8	The Vellár causeway on Yémbal Road.	4th mile on Road No. 6.	69,000	The total length of the causeway is 480 ft. with a road width of 15 ft. and 4 undervents of 6 ft. span each. Opened by Mrs. Holdsworth on March 27, 1933.
9	Bridge across the Nerinjikkudi river on Konnaiyur Road.	13th mile on Road No. 18.	29,000	A Girder Bridge of 5 spans of 30 ft. each. Opened by Mr. S. Burn.
10	The Manimukthar Bridge near Yenádi on the Perumánádu—Konnaiyúr Road	25th mile on Road No. 18.	5,000	A Girder Bridge of 2 spans of 15 ft. and 2 of 6 ft. each.
11	"The Tottenham Bridge" over the Agniár on Búdalúr Road.	12th mile on Road No. 2.	17,000	A Girder Bridge of 5 spans of 34 ft. each. Opened by Sir A. Tottenham on January 8, 1935.
12	The Agniár Bridge on Tanjore Road.	11th mile on Road No. 3.	...	An arched bridge of 7 spans of 30 ft. each.
13	The Agniár Bridge on Karambakkudi Road.	12th mile on Road No. 4.	63,000	A Girder Bridge of 3 spans of 60 ft. each. Opened by Rao Bahadur P. K. Kunhunni Menon in April 1925.
14	The Ambuliyár Bridge on Álangudi Road.	12th mile on Road No. 4.	10,500	A skew Girder Bridge of 3 spans of 28 ft. each. Opened by Mrs. Holdsworth in December, 1933.
15	The Nariár Bridge on Álangudi-Karambakkudi Road.	18th mile on Road No. 4.	5,000	A skew Girder Bridge of 27 ft. span. Opened by Sir A. Tottenham, on March 4, 1936.

No.	Name.	Situation.	Approximate cost.	Remarks.
			Rs.	
16	The Thodakkár Bridge on Manappárai Road.	26th mile on Road No. 9.	4,760	A Girder Bridge of 30 ft. span. Opened by Sir A. Tottenham, on January 10, 1934.
17	The Pérámbur Scour Sluice and Bridge on Virálimalai-Kalamávúr Road.	7th mile on Road No. 20.	18,500	A masonry arched Bridge of 3 vents of 18 ft. span each with 6 scour vents of 7½′×6′. Opened by Mrs. Holdsworth on March 7, 1933.
18	The Pérámbúr calingula Bridge.	Do.	5,500	A Girder Bridge of 3 spans of 23½ ft. each. Opened by Mrs. Holdsworth on March 7, 1933.
19	The Nariár Bridge on Karambakkudi Road.	23rd mile on Road No. 4.	9,200	A Girder Bridge of 2 spans of 32 ft. each, 2 of 10¼ ft. each and one of 16 ft. Opened by Mrs. Holdsworth on March 4, 1933.
20	The Kòraiyár Bridge near Rájagiri.	24th mile on Road No. 10.	15,000	A masonry arched bridge of 3 spans of 30 ft. each.

The Railway*.—The idea of a Railway for Pudukkóttai was entertained so early as 1875 when His Highness the then Raja expressed the opinion that, as the country afforded "the best route to Rámésvaram from the north, a line from Trichinopoly to Rámésvaram would be very popular." In 1886, the question was revived, and a preliminary survey was made with the intention of building a line from Trichinopoly to Pudukkóttai at State cost. Ten years later it was felt that the Railway must be carried even beyond Pudukkóttai as far as Kànàdukàthan, and a fresh survey was ordered. Next year the scheme became more ambitious, and a line was proposed as far as Thondi on the eastern coast. The Agent and the Chief Engineer of the South Indian Railway inspected the proposed route, an Assistant Traffic Manager reported favourably on

* Much of the information under this head was very kindly furnished by the Agent of the South Indian Railway.

traffic prospects, and arrangements were made to issue a prospectus. For the next three years, that is, till 1901, the question was shelved and nothing was done except to open a Traffic Return Station at Tirumayam. A light or road Railway as far as Pudukkóttai town was then considered, and it was proposed to 'encourage private enterprise if no other course be open.'

By this time the Madura–Pámban line had been opened, but it was felt to be an unnecessarily devious route for through traffic from Ceylon to Madras and the North. A proposal was consequently made to shorten it by connecting some station on the Pámban section with Tanjore through Pudukkóttai. The State proposed to pay for the portion of the line running within its territory, and arranged to form a syndicate since its surplus funds were "hardly sufficient" to meet the expenditure. But a deadlock soon ensued since the Tanjore District Board, seeing that the proposed line passed mainly through Pudukkóttai territory and the districts of Madura and Rámnád, and would not develop any of its own taluks, brought forward a counter proposal to connect Arantángi with Ràmnàd by a line which would for a short distance run through the south-east and rather unimportant corner of the State across the existing road to Yémbal. On top of all these came the Government of India's proposal to construct at their own cost a line for strategic purposes from Tanjore or Trichinopoly via Pudukkóttai to connect with the Pàmban line; and the whole matter came once again to a standstill awaiting the pronouncement of the Railway commission which sat in Madras in February 1903.

The conclusions of the Railway commission were in favour of a line through Pudukkóttai. It said "from a consideration of the evidence in regard to the needs of the Districts lying south of Trichinopoly, it had no hesitation in recommending as the southernmost section of the required line an alignment from

Ramesvaram *via* Ràmnàd, more or less to Trichinopoly," and Government were willing to consider proposals for a line on "much the same alignment as the existing metalled road from Trichinopoly to Pudukkóttai."

Ten more years passed; and in 1914 the question was again re-opened. After protracted negotiations with Government, the Railway Board, and the South Indian Railway authorities, it was decided to construct a metre gauge line on rebate branch line terms from Trichinopoly to Pudukkóttai. The construction of the line was however prevented by the difficulty of procuring rails and girders owing to the Great War.

At the instance of the Railway Board, Mr. J. Izat, State Railway Engineer, made an investigation into the Railway requirements of Southern India and recommended the opening of two chord lines one from Trichinopoly Jn. to Maniyàchi Jn. via Kàraikkudi and Mànàmadura, and another from Arantàngi to Kàraikkudi. The Railway Board, in reviewing his recommendations in July 1923, observed that a Railway from Arantàngi to Maniyàchi via Kàraikkudi and Mànàmadurai besides achieving the object underlying Mr. Izat's proposal, would be far less expensive, and subsequently sanctioned an Engineering Survey of this line. Early in February 1924, the Managing Director of the S. I. Railway, at a meeting of the Railway Board, undertook to re-examine the traffic prospects of a Trichinopoly-Pudukkóttai-Kàraikkudi line, obviously with the intention of eventually linking Trichinopoly via Pudukkóttai with the proposed Arantàngi–Kàraikkudi–Mànàmadura–Maniyàchi Railway. A Traffic Survey was accordingly made in May 1924. The proposed Railway was aligned to pass through Sembattu, Nallúr, Kíranúr, Nàrttàmalai, Pudukkóttai, Tirumayam, Kànàdukàthan, Pallathúr, Kóttaiyúr and Kàraikkudi. It was finally decided that the Trichinopoly–Mànàmadura scheme should have precedence over the others.

Field work on the Trichinopoly–Kàraikkudi Railway Survey was started at the end of August 1925 and was completed at the end of March 1926. The distance traversed by the Railway from Trichinopoly to Mànàmadura is as follows:—

1.	Trichinopoly Taluk.	From mile	0·00 to mile		5·32.
2.	Pudukkóttai State.				
	Kolattúr taluk	,,	5·32 to	,,	29·10.
	Álangudi taluk	,,	29·10 to	,,	34·82.
	Tirumayam taluk	,,	34·82 to	,,	45·61.
3.	Rámnád District	,,	45·61 to	,,	95·22.

The line is of the Metre Gauge, but it could without difficulty be converted to Broad Gauge. The ruling gradient is 1 in 200 or 0·5 per cent compensated. The sharpest curve is one of 4° or 1,432 feet radius, near Pudukkóttai station.

The line leaves Trichinopoly Junction in a south-westerly direction and runs parallel to the Madura main line for about ¾ mile. It then turns due South till clear of the Danger Zone of the Rifle Range, when it curves to the south-east and runs straight for about 4 miles, until it approaches the Trichinopoly–Pudukkóttai main road near mile 7. Sembattu station is at mile 4. From mile 7 the line follows the general direction of the Pudukkóttai main road and keeps fairly close to it all the way to Pudukkóttai. Kumàramangalam, the first station within the State limits is at mile 8¼, Tondaimàn Nallúr, at mile 13½, Kíranúr, at mile 17¾, Nàrttàmalai, at mile 22¼, Vellanúr, at mile 25¾, Pudukkóttai, at mile 32¾, Namanasamudram, at mile 36½ and Tirumayam, at mile 42½, after which the line runs in a southerly direction to Kàraikkudi.

The link between Trichinopoly and Pudukkóttai thus forms part of the new through main line from Madras to the south which has shortened the distance between Trichinopoly and Ceylon by 31½ miles. The railway has been constructed with flat grades and easy curves for the running of fast trains, and is equipped with the latest type of permanent way. The work of construction was started in December 1927, and the line took 16 months to build.

The Trichinopoly—Pudukkóttai section was opened for traffic on April 17, 1929, and the Pudukkóttai—Mànàmadura section on July 1, 1930.

Two important through trains, the Ceylon Boat Express and the Fast Passenger to Dhanushkódi run through Pudukkóttai, and through carriages are run on the connecting trains of this section and are attached to the Trivandrum Express trains at Trichinopoly.

The following are the outward traffic figures for the stations within the Pudukkóttai Territory for the year 1934—35.

Station.	No. of passengers.	Passenger earnings including parcels.	Weight in maunds.	Goods earnings including live-stock.
		Rs.		Rs.
Kumáramangalam ...	10,302	2,299	42	15
Tondaimán Nallúr ...	9,805	2,995	2,736	680
Kíranúr ...	28,877	12,066	557	196
Nárttámalai ...	16,996	5,532	62	14
Vellanúr ...	7,238	1,978	4	1
Pudukkóttai ...	1,85,446	1,59,724	75,519	18,429
Namanasamudram ...	24,538	7,791	1,544	578
Tirumayam ...	80,350	40,376	11,740	2,701

Post Offices.—In 1838, the State opened a Post Office in the capital, and in 1879, sub-post offices in the Taluk head-quarters. The work of these Post Offices was confined to the transmission of letters, packets and parcels. In May 1866, the British Government opened an experimental Post Office in the capital; but the measure had not the support of the then Raja who considered it as "throwing disgrace" upon the State and as "calculated to lower him in public estimation." When the Political Agent pressed him to reconsider this view, the Raja replied that "there existed no necessity for establishing a British Post Office at the cost of the British Government and that nothing should be done that would impair the rights and privileges till then enjoyed by the State." Thereupon the British Government abolished the experimental Post Office in

December 1866. In June 1873, another attempt was made to open a British Post Office in the capital, but with no better success. Sir Sashia Sàstriàr, however, succeeded in prevailing upon Ràjà Ràmachandra Toṇḍaimàn Bahadúr to permit the opening of a British Post Office. On April 1, 1884, the Ràjà cheerfully consented to the establishment in the capital of a combined British Post and Telegraph Office; and the people of Pudukkóttai enjoyed for the first time the advantages of the Money Order, Insurance, Value Payable Post, Savings Bank and other services of the British Postal system. In one of his letters to Sir Sashia Sàstriàr, Sir Henry Stokes observed:—"I was exceedingly glad to learn that you are getting so civilised in Pudukota as to have a post office. You are really getting on!" In 1893, Sir Sashia, who was then Dewan-Regent, opened negotiations with the Madras Government for the amalgamation of the State Postal department with the British Postal department, and on their successful termination passed a Regulation in 1894 amalgamating them and handed over the State Post Offices to the control of the Imperial Postal system.

The Post Offices in the State are now under the immediate control of the Superintendent, Trichinopoly Division. There is no Head Post Office in the State; a list of the offices now working in the State is given below. All the sub-offices (except that at the Pudukkóttai Public Offices) are combined Post and Telegraph offices. There are no separate Telegraph Offices in the State.

SUB-OFFICES.

1. Pudukkóttai (Pudukotah).
2. Pudukotah Public Offices.
3. Álangudi.
4. Arimalam.
5. Karambakkudi.
6. Kiranúr.
7. Kònápet.
8. Kulipirai.
9. Nachándupatti.

10. Ponnamarávati.
11. Rámachandrapuram.
12. Ráyavaram.
13. Tirumayam.

BRANCH OFFICES.

1. Kadukkákádu.
2. Kolavóipatti.
3. Venkatakulam.
4. Kíḻánilai.
5. Kílánilaikóttai.
6. Thánjur–Tirumayam.
7. Puliyúr.
8. Nírpalani.
9. Káraiyúr.
10. Kuruvikondánpatti.
11. Rángiám.
12. Virálimalai.
13. Panayapatti.
14. Viráchilai.
15. Álavayal.
16. Koppanápatti.
17. Mélasivalpuri.
18. Nagarapatti.
19. Végupatti.
20. Annavásal.
21. Kudumiámalai.
22. Perungalúr.
23. Púvarasakudi.
24. Tirugókarnam.
25. Tiruvarankulam.

Air mails are despatched from Pudukkóttai and most of the other Post Offices in the State on Sundays and Wednesdays, and are received for delivery on Sundays and Thursdays. These mails are carried by rail to Madras and from there by the aeroplanes of Messrs. Tata Sons Ltd. to Karachi where they are transferred to the aeroplanes of the Transcontinental and Imperial Airways. The ordinary inward Foreign mails are delivered at Pudukkóttai on Sundays, and the outward Foreign mails are despatched on Thursdays.

Tolls and Toll-Gates.— The following is a list of the town and frontier gates in the State, at which tolls are collected by contractors to whom the right is leased out annually by the State authorities. The Revenue under this head was Rs. 1,48,189, Rs. 1,30,024, Rs. 1,23,261 and Rs. 1,53,625 respectively for the four faslis 1342 to 1345.

TOWN GATES.

1. Tanjore Gate (at Sangilikundu urani).
2. Trichinopoly Gate (near Karupparkóvil).
3. Madura Road Gate (on the Kundár).
4. Annavásal Road Gate (at Tiruvappúr).

5. & 6. Álangudi Road Gates.

7. Kadayakkudi Road Gate.

FRONTIER GATES.

1. Máttúr.
2. Valavampatti.
3. Thithánviduthi.
4. Munugudipatti.
5. Agavayal.
6. Aramanaipatti.
7. Kónápet.
8. Pillamangalam.
9. Alagápuri.
10. Kattayándipatti.
11. Sengampatti.
12. Ponnusingáyipatti.
13. Rájagiri.
14. Vittamapatti.
15. Annavásal (Mukkannámalaipatti Road).
16. Vengarampatti.
17. Rasálipatti.
18. Puduvayal—Pallathúr Gates (two Gates, one at the junction o the Puduvayal and Pallathúr Roads and the other at mile 23/3 on the Pallathúr Road).

Accommodation for travellers and Travellers' Bungalows.—There is a fine Residency or guest-house in the capital for the use of the Agent to the Governor-General when he visits the State and of other State guests. It was much

improved before Their Excellencies the Viceroy Lord Willingdon and Lady Willingdon visited Pudukkóttai in December 1933. Near the Public Offices are two Guest-houses and a Travellers' Bungalow which may be occupied on the Darbar's permission. They are furnished, and food, Indian or European, is provided.

The rest houses at the following places provide furnished accommodation for travellers, but not food.

Ådanakkóttai.
Nárttámalai.
Mirattunilai.

There are several Vattam cutcherries, which afford primitive accommodation for camping officers and others.

Choultries.—There were formerly 21 choultries distributed along the important roads. Of these 11 were State institutions. The largest of them is the Sirkar choultry at the capital. It has a spacious shed in which hundreds of Brahmins are fed free during Dussarah. In addition to the choultries a large number of water *pandáls* are opened in the hot weather at which the wayfarer can halt, and refresh himself. In cosequence of the opening of the railway, and the introduction of motor bus services, the need for choultries (chattrams) is no longer felt, and the State chattrams have all been closed, except the Town chattram. (See chapter on Devastanam).

CHAPTER IX.

PUBLIC HEALTH.

SECTION I.—INFECTIOUS AND EPIDEMIC DISEASES.

Cholera.—Outbreaks of cholera are no longer so frequent nor so severe as formerly. It may occur either in the hot or in the cold weather but is generally associated with the cold weather when the rains wash human excreta and other filth into the drinking-water ponds. Its origin is often due to imported cases from Trichinopoly and other places, and hence it most commonly occurs in the Kolattúr taluk. Sometimes the infection is traced to pilgrims returning from crowded festivals such as the *Swargavásal Ekádasi* at Srirangam, and the *Kárthigai Dìpam* at Tiruvannàmalai, or the local Màriamman festival at Nàrttàmalai. That the backward classes contribute a larger number of victims than others, is, no doubt, due to their insanitary homes, and habits and in particular to their indifference to the cleanliness of their surroundings and preference for drinking the water of *uranis* (ponds) which is almost inevitably polluted rather than that of wells when the latter have been provided. Mortality is increased by the indifference and folly of the victims who do not seek timely and proper medical aid while their family will even try to conceal it from some irrational dread of official interference.

How much the country suffered in the past from cholera cannot be ascertained with certainty, a few facts are given below. Mr. Clarke, reporting on the State in 1859, referred to a 'great loss' from cholera in that year. In 1866–7, cholera and small-pox carried on their ravages to a 'great extent.' In March 1871, the outbreak was severe. 1883–4 saw an unusual recrudescence. When it entered the State Jail, panic prevailed, and the convicts had to be removed to a temporary building to the south of the town. Both the capital and the interior were affected in 1887–8, when out of 636 reported attacks, 402 ended fatally.

In certain years particular localities were severely affected. Kolattúr, as already observed, has often suffered in this way. Tiruvappúr was affected in 1889–90, and Annavàsal and Nedungudi in 1895.

In 1891–2, the disease raged all over the State and claimed 889 victims. The attack of December 1897 necessitated the opening of cholera camps, the observation and quarantining of pilgrims returning from the *mahámakham* festival at Kumbakónam, and the passing of an Epidemic Diseases Regulation.

In 1899 the disease prevailed from November to June next, and the loss of life was considerable. 951 deaths occurred in 1907, 964 in 1908, and 1,154 in 1914–5. Between 1924 and 1928 there were 4,180 fatal cases.

The Darbar have always taken expeditious steps to stamp out the disease at its first appearance. When an outbreak is reported, special attention is paid to the preservation of drinking water from pollution, and medical stores are hurried to the infected locality in charge of duly qualified medical men. In former times, a usual method of disinfection in towns of which the efficacy may well be doubted, was to burn large quantities of tarred wood at the street corners.

Scarcity of water, on account of severe drought, in the years 1924 to 1928 and again in 1934–35 was among the causes that contributed to the spread of this disease.

Before 1931, there were no means of scientific diagnosis such as are now afforded by the Bacteriological Section of the Town Hospital, where the microscopic examination of culture enables the presence or absence of Cholera vibrios to be determined. As a result, it may be presumed, of the opening of this section, and of other factors such as, intensive propaganda, the sinking of numerous drinking wells in the villages, prompt treatment of patients, disinfection of affected localities and mass inoculation with Anti-Cholera Vaccine,–"Bili-Vaccine" there

were only stray cases of Cholera in the State between 1931 and 1934, and the mortality was much lower than on the previous outbreaks.

In 1935, however, there were 77 deaths from Cholera. There was scarcity of drinking water in many villages; and the Darbar sanctioned the sinking of drinking water wells in all parts of the State. In fasli 1344, 291 wells were ordered to be sunk and 120 existing wells were either deepened or improved. The actual expenditure incurred in the fasli on such works was Rs. 18,388. In fasli 1345, 230 new wells were sunk and 78 repaired. 75 wells were in progress of sinking. In addition, where springs could be found in river or tank beds, shallow pools called *Oothus* were dug. In fasli 1345, 21 bore wells were sunk, and 18 drinking water *uranis* were repaired. The total expenditure in fasli 1345 was Rs. 1,25,409.

Small-pox.—This is usually a hot-weather disease, though not unknown in the rainy months. The traditional practice of hanging a bunch of margosa leaves over the door of an infected house does much indirectly to prevent its propagation since it warns outsiders to avoid all intercourse with the affected household.

Severe outbreaks of small-pox occurred in 1866–7, 1867–8, 1874–5, 1876–7, 1884–5, 1889–90 and 1891–2. There were 420 fatal cases in 1905–6 and 559 in 1907–8. Between 1922 and 1928, 978 deaths were reported. Between 1931 and 1934, there were 1,863 deaths. It would appear that the disease has become endemic in this part of South India, frequently taking an epidemic turn.

Vaccination.—Vaccination was introduced in 1812 at the suggestion of Sir William Blackburne. Raja Vijaya Raghunàtha Tondaimàn and his brother were the first subjects, and to their example and wisdom, the inhabitants are now indebted for a "blessing which will preserve them and their children from a loathsome and fatal disease." In March 1867, a vaccinating

staff was trained and organised by the British Deputy Superintendent of Vaccination at Tanjore. By 1875, the movement had come to stay and had made considerable progress. In that year three Vaccinators were at work; people had "no serious objection to the operation"; and a proposal, though premature, was set on foot to make it compulsory for infants. The persistent recurrence of small-pox in the succeeding years drew attention to the value of vaccination as a preventive measure, and in 1880, the State went to the length of offering a special *batta* or bonus to all who submitted to it.

It would appear that inoculation was from arm to arm till 1892, after which the objections to the method were realised and lanolin lymph was imported from Bangalore. Three years later, it was resolved to open a calf-depôt, and an officer was deputed to Bangalore to learn to prepare lymph. In 1910, a vaccine depôt was built "on the model of the Guindy Institute." Here all the lanolin paste required for the State is now prepared with seed-vaccine procured as necessary from Madras, Bangalore and Belgaum.

The progress of vaccination has been slow but steady. The usual obstacles have been fear of innovation, general ignorance and backwardness, the indifference and apathy, and in some instances, the hostility, open or covert of the masses. In 1898, for instance, the calf-depôt remained closed for some months because people thought that it represented an attempt to introduce anti-plague-inoculation. But no compulsion was introduced for a long time as it was feared that it might do more harm than good. On the other hand, it was hoped that the beneficent results of a number of successful vaccinations would have their educative value, and open the eyes of the people to the efficacy of the treatment. Year after year, the Revenue officers were enjoined to give special attention to vaccination. They were required to educate the people, besides checking the work of the Vaccinators and reporting on unprotected subjects and areas.

In spite however of all the good intentions of the State, progress was disappointing. Vaccination was consequently made compulsory in the town in 1898–9. Ten years later, compulsion was extended to 67 villages; and in October 1911, to the whole State.

The effects of Primary vaccination in infancy have been found to disappear after about seven years. Re-vaccination is therefore carried out extensively in both affected and threatened areas. In fasli 1345, 10,967 persons were re-vaccinated, and it is gratifying that not one of them contracted the disease. A Regulation providing for compulsory re-vaccination was passed in fasli 1345. On the whole the control of this disease may be said to be satisfactory since the population are becoming fairly well-protected by continued vaccination, and by intensive vaccination, a threatened outbreak in 1935–36 was effectively checked.

Vaccination Return (consolidated)—Fasli 1344-1345.

Name of vaccine taluk.	Fasli 1345.				Fasli 1344.	
	Primary vaccination.	Re-vaccination.	Total number vaccinated.	Total successful cases.	Total number vaccinated.	Total successful cases.
Álangudi taluk ...	3,626	3,055	6,681	5,661	7,926	6,402
Tirumayam taluk ...	4,101	3,722	7,823	6,280	6,841	5,122
Kolattúr taluk ...	4,332	2,496	6,828	5,570	6,907	5,983
Town Depôt ...	781	1,694	2,475	1,496	2,725	1,471
Grand Total ...	12,840	10,967	23,807	19,007	24,399	18,978

The vaccinating staff which had a strength of only three in 1875, was increased to nine Vaccinators, two probationers and one Inspector in 1883. At present there is a Health Inspector assisted by the Vaccine Depôt Superintendent and 10 Vaccinators.

Guinea-worm.—Not long ago, Pudukkóttai town enjoyed unenvied notoriety as the principal home in Southern India, of the Guinea-worm (நரம்புச்சிலந்தி). This is a disgusting disease that makes its appearance in the hot months. The premonitory symptom is violent itching all over the body followed by the appearance of a small blister generally in the leg, though sometimes in the arm, or in the abdomen. In a few days the blister distends and bursts, revealing a good sized worm projecting out of a clearly visible orifice in a succulent part of the tissue.

The indigenous treatment is to fasten the worm to a rag round which it is daily coiled till the full length is thus drawn out, the affected part being cleansed and dressed every day with castor-oil. The worm is enticed out of the body by dipping the ailing limb in cold water to which it evinces considerable partiality, but these efforts are often frustrated by the rapidity with which it shrinks back when taken out of the water.

Woe to the ill-fated sufferer who, in his attempts to extract the worm, happens to break it. The vent in the tissue soon closes and all looks suspiciously well for a few days when another swelling forms in an adjacent part, accompanied by symptomatic fever. The dead worm acts as an irritant foreign body and sets up an abscess, and serious inflammation results. Excision becomes difficult as the worm often lies very deep in the tissue. The usual method is to poultice with boiled cow-dung or *erukkalai*, the leaf of Calotropis gigantea, till the abscess opens of its own accord or under the surgeon's knife.

Where the worm is intact, the disease runs its course from a fortnight to a month, but should it break, it may last for six months. Attacks confined to fleshy regions rarely result in injury, but where bony parts or joints are concerned, repeated annual attacks on the same limb may lower its vitality and even cripple it.

Sir A. Sashiah Sàstriar once described guinea-worm as a disease which "spares neither age, nor sex, nor caste, nor profession, and which continues to baffle the efforts of medical men." But the disease no longer appears so mysterious. It is due to a highly developed filaria called *Dracunculus medinensis.* The adult female—the male is rarely known to cause the disease—is about 40 inches long with a well developed mouth, æsophagus, intestine, and ovary. The fondness of the worm for water is due to the instinctive desire of the female to discharge her embryos into water which is their habitat in the larval state. On entering the water the larvæ grow for a few weeks in the bodies of intermediate hosts called *cyclops*—a tiny fresh water crustacean. If this water is drunk, the cyclops enter the stomach where they immediately perish in the acid of the gastric juice liberating the guinea-worm larvæ which passing through the intestines lodge in the tissues. In about a year the females become adult, are fertilised by the males in the connecting tissue about the mesentery and inject an irritant fluid into the subcutaneous tissue which causes the itching sensation and blister referred to above. When the blister opens, the parent gets an opportunity of discharging the contents of its ovary into water.

The etiology of the disease would therefore appear to be that some sufferer from guinea-worm bathes or washes in a tank the water of which is thus infected and when it is drunk, the larvæ enter the body of the drinker with the help of the cyclops. The prevention of the disease, therefore, lies either in not using the same tank for washing and drinking, in any case an obvious precaution, or in extirpating the cyclops by a thorough cleansing of the tank itself.

There are three periods on record, viz., 1869–71, 1881–3 and 1890–1 when guinea-worm was prevalent in epidemic form. In 1882, hardly a household escaped; in 1883, there was a still worse attack and in 1891, there were 110 cases. That the town is now free from the disease is no doubt due to the thorough measures taken to improve its sanitation in the eighties of the last

century. The attacks of 1869–71 were so serious that the Government of Madras thought it necessary in their Order dated April 29, 1872, to advise the thorough cleansing of the drinking water tanks and wells. This programme was not carried out however until ten years later under the vigorous administration of Sir A. Sashiah Sàstriar. The silt of all the drinking water tanks in the town and their feeding channels was removed, and precautions were taken to protect them from pollution. The attention subsequently paid to the conservancy of drinking water tanks has practically stamped out the disease. Recently however, there have been signs of its re-appearance particularly in Annavàsal, and the Health authorities are taking the necessary preventive precautions.

Hook-worm.—This is caused by a small worm *Ankylostoma Duodenale* which inhabits the intestines of man, sometimes in many hundreds. The female lays a large number of microscopic eggs which do not hatch within the host, but are expelled with the bowel discharges. Deposited on porous loamy soil, the eggs hatch after an incubation period of about 18 hours into tiny "wrigglers." These larvæ attach themselves to the exposed skin, very often to the soles of the bare feet, of the passer-by, bore through the skin, enter the blood stream, pass by way of the heart to the lungs, ascend to the throat, are swallowed and at last reach the intestines where they reside for years and gripping the intestinal walls with their teeth nourish themselves and thrive at the expense of the victim, whose vitality they sap. The parasite is dislodged by the use of germicides. Thymol was used till recently, but the germicides now used in the Town Hospital are carbon tetrachloride and oil of Chenopodium. (Goose-foot) Reinfestation can be prevented by not exposing the soles and by the use of footwear. The provision of sanitary latrines is of very great importance. The Department have not yet made a Hook-worm Survey of the State and are now treating cases mainly on their clinical symptoms. The disease

is widely prevalent among people who have returned from the Tea estates in Ceylon and have settled in Alangudi and Karambakkudi.

Fever.—In all returns relating to health and vital statistics prepared by the village officials, fever figures largely among the causes of death. This is due, as the Madras Census Report of 1911 observes, to the adaptation to European terminology of the traditional classification of all maladies as "hot" and "cold," and to the fact that the *vaidyan* under whose 'expert' advice, the returns are prepared brings a number of ailments under "the all-embracing classification of fever," which, it must be admitted, is a "fairly regular concomitant; if not immediate cause of death in the east." No specific fever is prevalent. There are no malarious places in the State. Enteric or Typhoid fever is rare, and when it occurs the attack is generally mild. Rheumatism is common but usually of the subacute type. Enlarged spleen also occurs. Influenza of a more or less severe type has been frequent. Its first appearance was in 1890, when, to use the language of the Administration Report, 'making the circuit of the world including India,' it 'extended to Pudukkottai also.' In 1892, the attack recurred in a milder form. The third epidemic was in the summer of 1918, when it was called Bombay or Basra fever, since it was believed to have been imported from Mesopotamia through Bombay.

Other diseases.—Among diseases of the digestive system other than cholera, dysentery prevails largely in its chronic and acute forms. Medical opinion inclines to the belief that anæmia may often be due ultimately to dysentery. Another cause of this widespread disease is no doubt the use of surface water stored in tanks for drinking. The disease next in importance is diarrhœa. Tuberculosis of the lungs occurs but rarely. The cases treated here are mostly of the bone and intestinal types. Skin diseases are common, especially itch and ringworm. According to the census of 1931, there were 185 lepers in the State, 144 of whom

were men and 41 women. "It is possible," writes the Census Superintendent, "that our figures, collected in a comparatively smaller area, are less inaccurate than those of our neighbours, but even here the sex proportions among the afflicted seem to leave no room for doubt that there has been some appreciable concealment among women sufferers" 139 patients were treated in the General Hospital in 1935–36 for syphilis.

Other Infirmities (in 1931).

Insane	...	... 153
Deaf-mutes	...	... 400
Blind	...	... 341

The number of insane persons is unfortunately increasing. There were only 54 insane in 1881; but the number rose to 81 within 30 years, and to 153 within the next twenty years. The number of deaf-mutes has doubled since 1881.

The medical inspection of school children has disclosed the fact that a large number have defective vision. Sensory organs do not receive the care that they deserve.

SECTION II.—MEDICAL RELIEF.

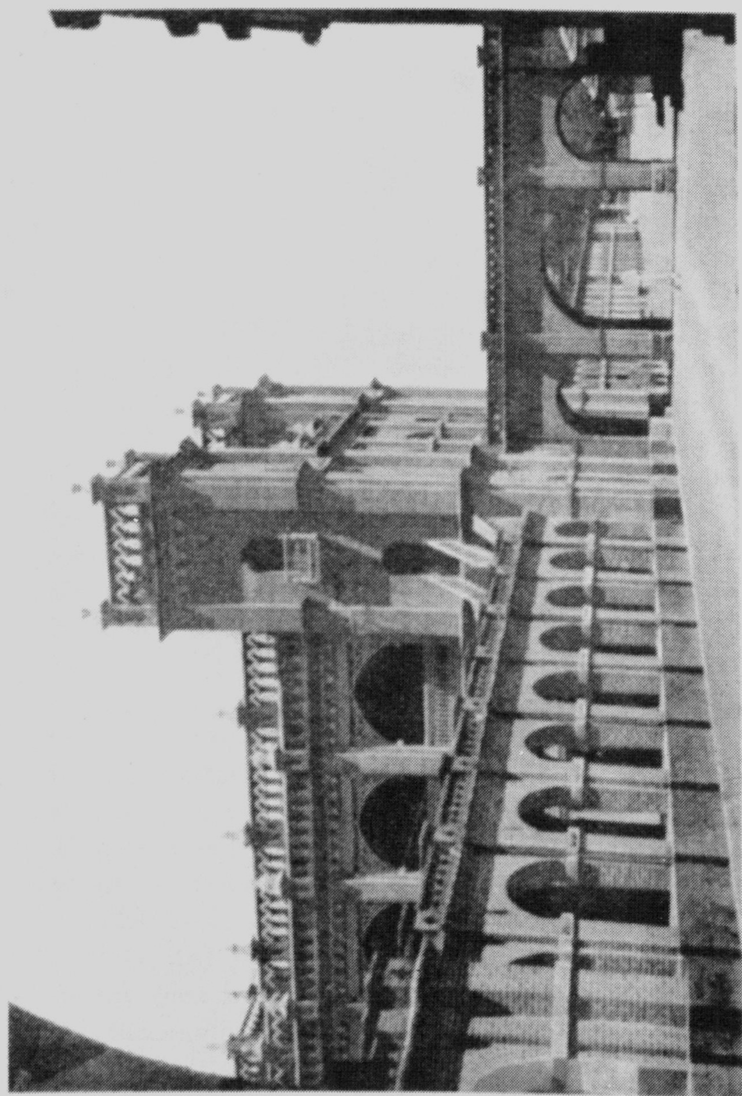
General.—Prior to the opening of medical institutions on the European system, the health of the population was committed to the care of '*vaidyans*' skilled in the indigenous healing art. In the villages, barbers practised as physicians and Surgeons, and their women as midwives. The State has always employed a number of these *vaidyans* and there is a State Ayurvedic dispensary in the capital.

Medical relief is at present given by the State in 14 institutions. H. H. The Raja's Hospital and H. H. The Rani's Hospital for Women and Children are situated in the capital. H. H. The Raja's Ayurvedic dispensary is located in the Old Palace, and an Allopathic dispensary, at Tirugókarnam. The others are rural dispensaries. There is an aided dispensary at Avayàpatti. There are some noteworthy endowments. The late Regent of the State, Ràjakumàr Vijaya Raghunàtha Durai Ràja has endowed a sum of Rs. 4,000 for the maintenance of a bed in the

General Hospital. Mr. M. G. Ramachandra Rao, the present Medical Officer of the State, has defrayed the entire cost of a Children's Ward, 'the Nanjunda Rao Ward,' as it is called, with three beds, and has further endowed Rs. 3,000 to meet the entire dieting charges of the children treated in the Ward. Mr. S. M. S. Chinniah Chettiar of Panayapatti has presented to the State a dispensary at Panayapatti with an endowment of Rs. 10,000. Mr. V. E. Letchumanan Chettiar of Valayapatti has provided for an in-patient ward of four beds for the Ponnamaràvati dispensary, and Mr. A. R. Arunachalam Chettiar of Véndampatti has endowed Rs. 1,000, the interest of which defrays part of the dieting charges of the poor in-patients of this ward. The Radiological section of the General Hospital is largely the gift of Dewàn Bahadúr M. R. Subbiah Chettiar.

H. H. The Raja's Hospital.—This was opened on October 14, 1851, under the name 'Raja's Free Hospital,' and an inscription on the site of the old Hospital building tells how it was built in loving memory of John Blackburne by "his affectionate nephew Rajah Ràmachandra Tondaimàn Bahadúr." At first it was financed from a charity fund called the Benares Chatram Fund, housed in a small building close to its present site, and staffed with native physicians and surgeons. Not only was the treatment free, but arrangements were also made to feed a limited number of in-patients. The 'dressers,' as the subordinate staff were then called, were occasionally sent to the villages to administer relief. That the institution met a real want may be inferred from the popularity that it enjoyed. In 1865-6,—in its 14th year, 4,050 patients 'not confined to the town only' were treated. The daily attendance varied from 70 to 80 in the next year. Ten years later, that is, in the year of Mr. Pennington's Report, 7,894 were treated.

About the year 1871, Dr. Brooking of Tanjore trained a staff for the Hospital, and had the institution placed under the supervision of the Surgeon-general of the Indian Medical Department,



In 1883, it was removed to its present spacious building. An operation room was added in 1906 at the suggestion of Dr. Van Allen of the Albert Victoria Hospital, Madura, who was officially connected with it from 1905 to 1907. In 1913–4, a ward of 12 beds was constructed for the exclusive use of Adi-Dravidas. In 1914–5, a resident House-Surgeon of high professional qualification was appointed to be in charge of the in-patients assisted by a staff of qualified nurses.

The improvements of the last ten years are touched upon below under the different sections.

1. *Out-patients section.*–The number of out-patients treated in the Hospital during the years 1915–16, 1925–26 and 1935–36 was :—

Year.	Number of patients treated.
1915–16	36,691
1925–26	38,955
1935–36	65,961

The figures indicate the growing popularity of this institution.

2. *The In-patients' Wards.*—There are 70 beds in the different in-patients' wards. The number of in-patients treated during fasli 1345 (1935–36) was 1,889 with a daily average of 93·55. These figures include 82 patients belonging to the State Police and Military forces. Of the 1,889 in-patients treated, only 9 died and 1,611 were cured.

There were 11 patients in this fasli in the Vijaya Raghunàtha Bed and 124 in the Nanjunda Rào Children's Ward. The average cost of dieting an in-patient ranges from Re. 0—2—6 to Re. 0—3—0, but this does not include the cost of food supplied daily from the Government choultry in the Town to the Brahmin and caste non-Brahmin in-patients.

3. *The Operation Theatres.*—There are now two spacious and well-equipped operation theatres, one of which is intended for septic operations. The number of operations performed in this Hospital in fasli 1345 was 1322, 572 on out-patients and 750 on in-patients, (345 under chloroform).

4. *The Pathological and Bacteriological Section.*—This section was opened in 1930. The work of this section is chiefly microscopical and cultural examination. Pathological conditions occurring in the in-patient and out-patient departments are examined by the Pathologist whose reports, are of use in the diagnosis and treatment of the diseases. Microscopical work consists of examination of urine, blood, and blood-smears, sputum and fæces, and serological examination of blood in cases of Typhoid and Syphilis. Microbiological tests and investigation of bacillary diseases by cultural methods are also carried out. The lymph prepared by the vaccine depôt is tested before it is despatched to the Vaccinators. During fasli 1345 serological examination of blood by different tests was made in 330 cases. The number of blood-smear examinations was 397 ; examinations of fæces, 687; of urine, 1,295; and of sputum, 102. Blood counts for determining the percentage of hæmoglobin were made in 90 cases. Examination of Leprosy cases by stain smears of nasal mucus and skin clip was made in 68 cases. 48 cases related to cultural and microscopical examination for Cholera *Vibrios*. Urethral and vaginal discharges for the detection of *gonococci* were examined by stain smears in 48 cases. Microtome sections for the diagnosis of benign and malignant tumours were cut in 4 cases.

This section is the State centre for anti-rabic treatment. Anti-rabic vaccine is got from the Pasteur Institute, Coonoor. 18 cases of rabid dog bite were successfully treated in fasli 1345, and 24 in fasli 1344.

In fasli 1345, 22 cases of Leprosy were treated in the General Hospital. The Chief Medical Officer made a Leprosy survey in the villages of Melàthur and Sikkippatti and treated all the sufferers with injections. To induce Leprosy patients to submit to injection the Darbar paid every patient from these two villages four annas for every injection; the total amount thus paid amounted to Rs. 141—8—0. The treatment has proved satisfactory. The Chief Medical Officer proposes to make a detailed leprosy survey of the whole of the Àlangudi Taluk.

5. *The Radiological and Elctro-therapy Section.*—As has already been stated above, the initial cost of this section was mainly contributed by Dewàn Bahadúr M. R. Subbiah Chettiar. It was designed by Captain Barnard, Director of the Barnard Institute of Radiology, Madras, and equipped under his guidance. H. E. the Viceroy, Lord Willingdon, laid the foundation stone of the building on December 13, 1933, and H. H. the Raja opened it on November 13, 1935. It measures 100 feet by 36 feet and consists of two sections, one for Radiology and the other for Electro-therapy. The flooring of the Radiological laboratory is entirely of wood as an insulation from electric shocks, and the bricks of the walls are impregnated with Barium salts to prevent the harmful X-rays from penetrating them. The Electro-therapy appliances are housed in another large and well-ventilated hall. The Victor Kx4 X-ray plant is very powerful and of the latest pattern and was supplied by the General Electrical Corporation. With the XP4 X-ray tube, it is as efficient a plant as any in South India. There is a second X-ray tube conveniently mounted on a table so as to be useful for screening purposes. The Electro-therapy section is equipped for Radiant heat baths, ultra-violet ray exposures, Diathermy, electric massage, and electric baths and with "universal exerciser."

The total number of patients treated from December 1935 to the end of June 1936 was 2,025, of whom 1,629 were out-patients and 396 in-patients. 124 were X-rayed, 91 were screened, and the remaining 1,810 were given Electric treatment.

The section has proved its efficacy in the treatment of cases of skin trouble, malnutrition, painful muscles, tendons, and paralysis.

6. *The Ear, Nose and Throat Section.*—This was opened in February 1936. Up to the end of June 1936, 3,070 cases were handled by the specialist in charge. 23 minor and 26 major operations of ear, nose and throat were performed. This section is equipped with apparatus of the latest type and promises to be very useful.

7. *The Dental Section.*—This section was opened in 1934 and is becoming increasingly popular. In fasli 1345, as many as 3,854 cases were treated.

8. *The Animal Vaccine Depót.*—This forms a separate section under the charge of a Superintendent. It prepares and supplies to vaccinators all the lymph required for vaccination in the State. The Seed Vaccine is now got from Belgaum, and with it calves locally purchased are inoculated. Every fortnight the lymph is extracted from them to be sent out as Glycerine lymph. Vaccine is only issued after examination in the Pathological and Bacteriological Laboratory. 28,179 grains of paste were prepared and 18,650 grains issued in fasli 1345.

General:—On March 29, 1899, Sir A. Sashia Sàstriar, wrote in the Hospital visitor's book—"The Hospital bids fair to prove one of the best Hospitals outside Madras in the Madras Presidency." In the same year, Sir Arthur Havelock, then Governor of Madras, remarked that "the building is admirably planned and is maintained in excellent order... ....The organisation seems to be highly satisfactory." Since 1899 the Hospital has steadily developed and is now acknowledged to be one of the premier institutions in South India. With the opening of an Opthalmic Section—a Sub-assistant Surgeon has been sent to the Minto Ophthalmic Hospital at Bangalore to be trained—its equipment will be complete. Whether regard be had to the design of the buildings, the accommodation, the equipment, or the staff, the Hospital is an institution of which Pudukkóttai may be proud. On the occasion of the Viceregal visit in December 1934, Her Excellency Lady Willingdon paid the following gratifying tribute:—

"I had a most interesting visit to this hospital and was very much struck with it. Such charming airy wards and so well kept. It was delightful to go round with the Medical Officer as he knows all about every case in his hospital and would explain all the difficult cases to me. I congratulate Pudukkottai on having such a hospital.

"(Sd.) MARIE WILLINGDON."

H. H. The Rani's Women & Children's Hospital.—This institution was opened as a Dispensary in the Old College buildings on November 9, 1900, and placed in charge of a duly qualified Lady Apothecary. In 1910, it was resolved to convert it into a Hospital for women, and buildings were erected in the heart of the town to accommodate it.

It continued to be a Dispensary however till fasli 1329 (1919–20). A qualified Lady Doctor was appointed in 1920, and it became the Rani's Hospital for women and children. The staff now consists of a Lady Doctor and a resident Sub-Assistant Surgeon with five nurses and three compounders.

The Hospital began with two wards accommodating 6 patients each, and a central block with 12 beds, four of which were reserved for children. The maternity ward had six beds. There are now four wards for all general diseases including maternity cases, with 52 beds in all. The total number of in-patients treated in fasli 1345 was 1,616 with a daily average of 63·5, while 24,439 out-patients were treated with a daily average of 182. 547 major surgical operations were performed of which 50 were done under chloroform. 473 cases were admitted into the lying-in-ward of which 374 were cases of normal labour, 70 of abnormal labour and 25 of abortion or miscarriage. Maternity aid was given in 208 cases in the Town by the Hospital staff. The total expenditure on the Hospital for fasli 1345 was Rs. 22,880.

Dispensaries.—There are twelve rural Dispensaries, and thus having regard to its area and population, the State is well served in this respect (see comparative statement on page 265 below), especially when it is remembered that the State is also exceptionally well-provided with roads. Each dispensary is in charge of a Sub-Assistant Surgeon assisted by a qualified staff. The following statements give statistics of medical relief rendered in the various medical institutions of the State.

Statement showing the number of Out-patients treated in all the medical institutions for fasli 1345.

No.	Name of the Institution.	Total No. treated.	British sub-jects.	Daily average.	Sexes.			Classes.					Expenditure.
					Men.	Women.	Children.	Hindus.	Muham-madans.	Other castes.	Euro-peans.	Eura-sians.	RS. A. P.
1	Town General Hospital, Pudukkóttai.	65,951	...	557·30	31,158	17,950	16,843	59,690	3,689	2,569	3	...	61,187-12- 2
2	Dispensary at Kolattur ...	13,660	21	64·43	7,214	2,554	3,892	10,595	1,968	1,097	...	...	2,958-12- 6
3	„ Perungalur ...	12,198	355	48·68	6,621	2,182	3,395	10,826	265	1,107	...	...	2,305-15-11
4	„ Karambakkudi ...	13,024	3,507	60·73	5,606	3,289	4,129	6,941	3,194	2,889	...	...	2,328- 2- 1
5	„ Alangudi ...	15,707	138	81·19	7,475	3,004	5,228	12,698	1,553	1,456	...	...	2,098-12- 6
6	„ Kilánilai ...	7,650	76	57·78	3,522	1,820	2,308	7,423	92	135	...	...	2,627- 6- 9
7	„ Tirumayam ...	11,834	1,797	97·93	5,823	2,596	3,415	10,398	949	487	...	...	3,147-14- 0
8	„ Ponnamarávathi.	19,890	58	98·15	9,063	5,031	5,796	19,073	628	189	...	...	3,129- 4- 5
9	„ Virálimalai ...	12,232	96	48·74	6,927	2,280	3,025	11,231	158	843	...	...	2,197-14-10
10	„ Annavásal ...	14,587	639	71·12	6,788	3,653	4,146	8,414	4,493	1,680	...	...	2,208- 1- 3
11	„ Tirugókarnam ...	18,096	...	122·83	8,324	5,654	4,120	17,622	127	347	...	...	3,708-14-10
12	„ Panayapatti ...	9,352	37	63·04	4,355	2,690	2,307	8,858	167	327	...	...	2,5819 4- 3
13	Rural dispensary at Avayápatti.	4,009	...	20·48	2,218	1,155	636	2,672	72	1,265	...	...	956- 0- 0
14	H. H. The Rani's Hospital, Pudukkóttai.	24,439	...	182·0	...	14,348	10,091	23,170	672	597	...	...	22,880- 8- 2
15	Ayurvodic dispensary at „ ...	24,303	...	146·53	11,859	5,958	6,486	22,898	1,216	189	...	...	2,993- 6- 5

Total expenditure for all institutions Rs. 1,17,310—2—1.

Statement showing the number of in-patients treated in the hospitals during fasli 1345.

Name of the institution.	Total number treated.	Daily average.
Town General Hospital ...	1,942	94·69
Ponnamaravâthi Dispensary ...	137	2·95
H. H. the Rani's Hospital ...	1,616	63·5

Statement comparing the extent of Medical Relief afforded by the State with that afforded in the adjoining British Districts.

No. (1)	Districts and the State. (2)	Total area in square miles. (3)	Total population according to the census of 1931. (4)	No. of Medical institutions. (5)	Average area served by an institution. (6)	Average population served by an institution. (7)	Remarks. (8)
1	Pudukkottai ...	1,179	4,00,694	*15	78·60	26,713	* Including the Ayurvedic Dispensary and the Aided Dispensary, Avayapatti.
2	Trichinopoly ...	4,314	11,93,245	20	215·70	95,662	
3	Tanjore ...	3,742	23,85,920	52	71·96	45,883	
4	Madura ...	4,912	21,95,747	35	140·34	62,736	
5	Rámnád ...	4,819	18,38,955	37	130·24	49,701	

N. B.—There are 435 subsidized rural dispensaries in the Madras Presidency but the number of such institutions in each district is not given in the Report. So the subsidized rural dispensaries have not been included in column 5 of this statement.

Density of Population in { The Pudukkóttai State ... 340 per square mile.
The Tanjore District ... 638 per square mile. }

Administration.—The department now consists of a Chief Medical and Sanitary Officer who is the Administrative head of the whole department, one Resident Medical Officer in charge of the General Hospital, one Radiologist, 17 Sub-Assistant Surgeons including the Lady Sub-Assistant Surgeon attached to the General Hospital and one Dentist. The Lady Doctor and a Resident Lady Sub-Assistant Surgeon are in charge of the Rani's Hospital. The Ayurvedic dispensary is under the charge of a qualified physician trained in the Sri Venkataramana Dispensary, Mylapore.

Financial.—The total expenditure of the Medical Department in fasli 1345 was Rs. 1,23,386. The cost of maintaining the Hospitals and Dispensaries was Rs. 1,14,316. The total cost of medicines and surgical instruments purchased during fasli 1345 for the General Hospital exceeded Rs. 23,000. The expenditure of the Vaccination department was Rs. 4,058, and that of the Public Health department Rs 1,730. The cost of maintaining the Veterinary Hospital in the Town was Rs. 3,280.

SECTION III.—VITAL STATISTICS.

No vital statistics were collected till 1876. Statistics was first compiled only for the town, and afterwards for the whole State. Though the registration of births and deaths is now compulsory, the figures are more or less unreliable except those for the Municipality, the blame for which must be laid at the door of the village officer who, 'amid the toils of keeping accounts and collecting *mamuls*, pays scant heed to what he and his friends consider the idle curiosity of an eccentric Sircar'.* The following table gives the vital statistics for the last twenty years.

VITAL STATISTICS I.

Fasli.		Births.	Deaths.
1326 (1916–17)	...	7,551	7,202
1327 (1917–18)	...	7,805	7,715
1328 (1918–19)	...	8,591	12,310
1329 (1919–20)	...	8,548	8,923
1330 (1920–21)	...	8,905	7,809
1331 (1921–22)	...	8,511	6,464
1332 (1922–23)	...	8,897	7,573
1333 (1923–24)	...	9,294	7,287
1334 (1924–25)	...	8,687	8,864
1335 (1925–26)	...	7,926	8,286
1336 (1926–27)	...	7,669	9,256
1337 (1927–28)	...	6,859	8,192
1338 (1928–29)	...	6,821	8,042
1339 (1929–30)	...	6,409	5,955
1340 (1930–31)	...	5,816	5,696
1341 (1931–32)	...	5,809	5,281
1342 (1932–33)	...	7.204	4,851
1343 (1933–34)	...	7,041	5,945
1344 (1934–35)	..	6,726	6,542
1345 (1935–36)	...	7,617	6,602

* Madras Census Report for 1911—Part I.

VITAL STATISTICS II.

Fasli.	Number of deaths from					Total.
	Cholera.	Small-pox.	Fevers.	Dysentery and Diarrhoea.	All other causes.	
1326 ...	nil	300	...	...	...	7,022
1327 ...	·501	209	...	...	...	7,715
1328 ...	466	656	4,974	...	...	12,310
1329 ...	503	718	1,390	...	...	8,923
1330 ...	75	149	1,256	...	...	7,809
1331 ...	95	64	...	...	...	6,464
1332 ...	9	300	974	...	...	7,573
1333 ...	87	112	828	341	5,919	7.287
1334 ...	1,480	119	870	314	6,081	8,864
1335 ...	545	291	805	276	6,369	8,286
1336 ...	1,065	156	761	473	6,811	9,256
1337 ...	351	47	631	361	6,802	8,192
1338 ...	651	47	677	337	6,330	8,042
1339 ...	86	3	623	257	4,986	5,955
1340 ...	97	6	743	268	4,582	5,696
1341 ...	10	207	624	321	4,119	5,281
1342 ...	1	434	658	139	3,619	4,851
1343 ...	nil	168	933	246	4,598	5,945
1344 ...	124	245	906	311	4,956	6,542
1345 ...	nil	41	786	394	5,381	6,602

SECTION IV.—PUBLIC HEALTH ORGANISATION AND ADMINISTRATION.

The Public Health Organisation for the State is in a real sense the outgrowth of the Medical Department. At first this Department which consisted almost entirely of the staff of H. H. The Raja's Hospital mainly ministered to the medical officials and needs of the residents of the Town. In 1894 the Chief Medical Officer in charge of the Raja's Hospital was designated the Chief Medical and Sanitary Officer and was charged with the supervision of medical service in the Taluks and in the Town municipality, as well as of public health activities in the interior. The supervision of rural sanitation which had hitherto been a function of the Tahsildars was transferred in 1902–1903 to the rural Sub-Assistant Surgeons. The Inspector of Vaccination was made an ex-officio Sanitary Inspector,

A Village Sanitation Regulation was passed in 1909–10. There are at present a touring Health Inspector and a staff of Vaccinators to assist the Chief Medical and Sanitary Officer.

Health Education.—The Health Department has now a complete magic-lantern outfit with a number of lantern slides. In Fasli 1345 the Chief Medical Officer visited 34 villages and the Health Inspector, 275. They gave 40 magic-lantern lectures and 275 discourses on health subjects, especially the preventive measures to be taken against small-pox, cholera, hook-worm and guinea-worm and anti-rabic treatment. Suggestions for the improvement of sanitation in villages were also given.

The Department has been making special and elaborate sanitary arrangements during the Màriamman festivals at Nàrttàmalai and Konnaiyur, and the Easter festival at Àvúr. A number of trenched latrines are constructed at these centres during the festivals. Drinking water sources are chlorinated. The Health Inspector visits food and ærated-water-stalls to ensure the purity of the articles sold. Advantage is taken of these festivals to do useful health propaganda work, and the precautionary measures taken by the Health staff serve as practical demonstrations to the people. The annual inspection of pupils in schools and in the College has now become a regular feature of the work of the medical staff. The Chief Medical Officer examines all the students of the local College, the Resident Medical Officer, all the boys of the C. S. M. High School and the Lady Doctor, all the girls of the Rani's High School. The sub-assistant surgeons of the Town and the Mofussil dispensaries examine the pupils of the rural elementary schools. The results of the medical examination are communicated to the parents through the heads of the institutions. The defects most commonly noted are malnutrition, bad teeth, and defective eye sight. The Health Inspector delivers health lectures in the college and at meetings of the teachers' associations; and this has helped to secure the co-operation of the teachers in the general campaign against disease and insanitation.

SECTION V.—VETERINARY HOSPITAL.

A Veterinary hospital was started in the capital town in Fasli 1318 (1908-09). It has a qualified veterinary surgeon who is under the administrative control of the Chief Medical and Sanitary officer. The hospital has accommodation in its wards for 4 horses and 10 cattle.

A touring veterinary assistant surgeon was appointed in fasli 1332 (1922-23), and placed under the control of the Dewan Peishkar. In fasli 1339 (1929-30), when Rinderpest broke out in the State, an anti-rinderpest campaign was started and anti-rinderpest serum for inoculation was got from the Muktesar serum institute. In Fasli 1340 the Darbar introduced Regulation No. 1 of 1931 on the lines of the Madras Cattle Diseases Act, for the prevention of the spread of cattle diseases in the State. But since Hospital pounds have not been instituted it has so far remained a dead-letter. In the same fasli, the Veterinary Surgeon in charge of the town Veterinary Hospital was deputed to undergo postgraduate training in the Madras Veterinary College in Pathology, Bacteriology, Parasitology and Immunology. The touring Veterinary assistant was sent later to the Madras Veterinary College to undergo practical training in the simultaneous method of serum inoculation against Rinderpest. This method of treatment has now been introduced in the State, and the serum and virus are got from the Civil Veterinary Department, Madras.. The disease is now almost non-existent. In fasli 1343, the Darbar increased the number of touring Veterinary assistants to three—one for each taluk. One touring Veterinary assistant surgeon has been trained in apiculture.

For the past three years Blackquarter has been prevalent in many villages in Àlangudi and Kolattúr taluks. The spread of the disease is being checked by *serum* and *filtrate aggressin* or *bacterin* inoculation on a large scale in the villages. The serum and other biological products, formerly got from the Muktesar Institute, are now got from the Bangalore serum

Institute. Castration of scrub bulls, i.e., bulls unfit for stud purposes, is done both in the town Hospital and by the touring Veterinary assistants. In addition to inoculation and castration, the touring Veterinary assistants treat general diseases of cattle.

The health of the livestock of the town dairy-farm is under the supervision of the surgeon in charge of the Veterinary Hospital. The animals in the Palace Stables are also under his care. In addition to his duties in the Veterinary Hospital, the town Veterinary Surgeon certifies and passes sheep for slaughter in the Municipal Sheep Slaughter House. In fasli 1344, 510 animals were rejected as unfit for human consumption.

In fasli 1345, 1,412 animals, of which 75 were equines, 1,157 bovines and 180 of other species, were treated in the Town Veterinary Hospital as out-patients. About 86 animals were treated as in-patients for various diseases. The daily average number of out-patients in the Hospital was 42·97, and that of in-patients 3·76. The number of operations performed in the Hospital during the fasli was 207, of which 64 were castrations of bovines.

The following statistics illustrate the work of the touring veterinary surgeons in the State in fasli 1345.

Veterinary Assistant.	Number of animals treated.	Number of animals inoculated.	Number of castrations done.
Álangudi Taluk	1,121	1,615	596
Kolattúr Taluk	193	37	43
Tirumayam Taluk	538	542	120
Total for Taluks ...	1,852	2,194	759

There were no cases of contagious or infectious diseases except of foot and mouth disease which is prevalent in many parts of the State at the time of writing.

CHAPTER X.

EDUCATION.

Indigenous schools.—In very remote times colonies of learned Brahmins were induced to settle in the country by free grants of land. In comparatively modern times either from piety or from love of learning, rulers such as Namana Tondaimàn, Sivagnànapuram Durai and Raghunàtha Tondaimàn founded settlements of Pandits at Namanasamudram, Vijayaraghunàthapuram, Tirumalaràyasamudram, Kadayakkudi and Kànappéttai, Thus arose the so-called *sarvamányam* villages, *shrótriem* villages, *bhaṭṭavritti* and *védavritti* lands granted for the maintenance of persons versed in Sanskrit and the Vedas. Moreover, the court supported Pandits who being spiritual and legal advisers to the Rulers, set up small schools, called *gurukulas*, in their homes, at which young men studied Sanskrit literature and grammar, and Hindu theology and philosophy,—a curriculum answering more or less to the Trivium and Quadrivium of the Middle ages in Europe.

There was also a system of mass education which played an important part in the village economy. The village teacher '*Vàthiar*' was as ubiquitous as the village priest. Each village maintained a teacher who lived precariously on a small income from fees supplemented by a share in the village produce. The school was sometimes held in the *pial* or verandah of the teacher's house, sometimes in the open air under a large tree, or in a simple building of mud and thatch. From the point of view of the parents this was a convenient place to which troublesome children could be sent as much to be kept out of mischief for the day as to be instructed, when their fathers did not need their help in the field. But since the intellectual needs of the village lad were few, the curriculum was unpretentious and could be completed in a year or two. The younger pupils were taught to read and write their mother tongue and

commit to memory a number of mathematical tables, while the older scholars read some classics such as the *Kural* and the *Naidatham*, besides getting by heart a Tamil thesaurus called *Nihandu*. The "modern side" was completely neglected, and in fact neither the teacher nor the taught was aware of its existence. Still it would be unjust to depreciate these little seminaries which for many centuries fulfilled a want and equipped the village boy with a degree of literacy sufficient to enable him to get on in his own occupation or trade.

Elementary Education.—The first State school was the charity school that Raja Vijaya Raghunàtha opened in the town in 1813, at which children were taught free and supplied with books and writing materials. The Indian Missionary Society, Madras, which came to the State in the second quarter of the last century opened some schools to maintain which His Excellency Raja Raghunátha made a free grant of lands. In the year 1848, there were 13 Mission schools at work. In 1857, a free English school was started in the capital. In 1875 and 1876, four similar but smaller schools were opened in Tirugókarnam (a suburb of the town) and at the taluk headquarters. But since they attracted few pupils except the children of òfficials they had to be closed in 1879 and 1880, so that in the latter year there only remained the English school in the town, and a few Mission and *pial* schools in the interior. As Mr. Pennington wrote in 1875 there was at that time no general system of education, and when no clearly defined line of policy had been laid down in British Indià itself it was not surprising that Pudukkóttai was backward. Even Sir A. Sashia Sàstriar, who was Dewan in 1880, was at first loath to interfere with the *pial* schools which appeared to him "to be doing very well in their own way and did not seem to want State support and State supervision." He also thought that any attempt by the State to spread Elementary Education on modern lines would present grave difficulties.

He wrote:—

"In the first place there is no well-to-do middle class among the resident agricultural population of the State. All are more or less only a few degrees removed from poverty and want their children to be at the plough and with their cattle instead of learning lessons in Geography and History in the new fashion schools. To such as care for a knowledge of reading, writing and arithmetic to the small extent they want, the indigenous *pial* schools are at hand and furnish at a very cheap rate and at home the necessary training in a couple of years or so. Thus it is very difficult to persuade the ryot parents to take their boys from the plough or the sheep-fold, to put them into school, there to be taught such unknown and unintelligible things as Geography, History, or Hygiene. It requires therefore a great deal of coaxing and takes a long time for a change to come over them in the matter. If the progress is slow, it is therefore simply inevitable. It should be allowed to take its own time."

By 1884 he had revised his views and cautiously framed a few rules providing for grants of money in aid of those old schools that conformed to the new requirements. Only 13 schools, including some Mission schools were willing to accept aid; so unattractive did the new curriculum and discipline appear. A full-timed Inspector was therefore appointed whose task was to attempt to convert schools to the new type. A book-depôt was opened in 1887–8 at which the 'new fashion' books were sold at cost price. Blackboards and other appliances which the old schools did without, but which the new order of things required were supplied gratis. Free sites for schools and subsidies for building them were also granted. In 1895–6, model schools with a trained staff and revised curricula were opened at important centres to serve as object-lessons to private schools in the vicinity. In 1902, further financial aid was given to the aided schools in the shape of results-grants awarded in addition to capitation grants. Since the spread of Primary

Education was still slow, a conference of experts was held in 1907, the deliberations of which resulted in opening a large number of State schools, furnishing teachers with suitable quarters, and improving their pay and prospects.

Free and compulsory Primary Education.—In accordance with a recommendation of the 1907 conference, Primary education was declared on 1st March 1908 to be free in selected areas, and at a Darbar held in 1912, His Highness the late Raja declared it free over the whole State outside the capital.

School Boards were formed at important rural centres, and they function to this day as means of ascertaining the opinion of non-officials regarding the educational needs of the different parts of the State, and securing their co-operation in spreading elementary education. In response to repeated demands made in the Representative Assembly, the Darbar appointed an Education Committee of officials and non-officials in fasli 1329, to enquire into the state of Elementary Education and to report on the desirability of introducing compulsory Primary Education throughout the State, and on the steps to be taken to promote the education of illiterate adults. As a preliminary step to the reorganisation of the educational system, the scale of pay of the different grades of Elementary school teachers and the scale of grants to aided school teachers were raised in 1920-21 and again in 1934, and the new scales compare very favourably with those obtaining in any British Indian province or in many Indian States. The Elementary Education Regulation (No. VIII of 1925) passed and promulgated on December 1, 1925, made it compulsory for all children between the ages of 7 and 11 to attend a recognised school. The Regulation was first introduced in the Taluk centres and in the villages constituting the Village Panchayat of Púvarasakudi. Its operation is being gradually extended; and the total number of compulsory education centres at the close of fasli 1345 (June 30, 1936) was 41 with jurisdiction over 103 Revenue villages and 49 hamlets.

Statistics of literacy by caste, creed and sex are given in Chapter III under 'Literacy'. On June 30, 1936, there were 16,425 pupils in Elementary Schools. The maximum number of pupils on the rolls in the fasli was 20,838 boys and 4,632 girls against 23,301 boys and 4,435 girls in the preceding fasli. The fall in the total number of pupils was due to the suspension of the Elementary Education Act throughout the fasli in view of the acute economic depression owing to the severe drought in 1935. The percentage of boys attending school on June 30, 1936 to the total number of boys of school-going age was 72·68 and that of girls 14·74. The total number of Elementary Schools was 340, made up of 180 State, 88 aided and 72 unaided schools. There was thus a school for every 3·5 square miles of the area.

Curriculum of Studies.—The course of studies in Elementary Schools includes reading and writing Tamil, and Arithmetic. In standards above the third, the Geography of the State and of the Madras Presidency, the History of the State, stories from Indian History, elementary Hygiene and Nature Study are taught. Drawing, gardening and other forms of manual work in Boys' schools, sewing, embroidery and garment-making in Girls' schools form part of the Elementary Education Syllabus. Kindergarten plays an important part in the education of children, and its place is taken in the higher standards by action songs and dramatization of lessons. The Darbar have recently directed that the syllabus of elementary schools should be revised so as to give it a rural and vocational bias. 36 of the 340 elementary schools are Anglo-Vernacular schools, in which English is taught from the third standard onwards. In 1935–36, there were 3,833 boys and 1,127 girls in these Anglo-Vernacular schools.

Girls' Schools.—In fasli 1337 there were 18 schools exclusively for girls in the State. In 1340, the number fell to 14 and in 1341, to 6, in consequence of the Darbar's policy of encouraging the co-education of boys and girls in the Elementary stage. In fasli 1345, Government maintained only one Girls' School; but

there were three aided schools and one unaided school (at Valayappatti—Ponnamarávati) exclusively for girls.

Teaching Staff.—In fasli 1345, there were 392 teachers in the State schools and 198 in the aided schools excluding the Pandits, Drawing and Music masters and Weaving and Physical instructors. Teachers of the Elementary Higher Grade are now more numerous than formerly though the number of Elementary Lower Grade men is still large. The number of untrained teachers holding the departmental licence is gradually going down as they are replaced by trained men. Many of the Higher Grade trained men are holders of the Secondary School Leaving Certificate. There are some University graduates in the cadre of Elementary School teachers.

Secondary Education.—There are now 18 Secondary Schools in the State. One is the Secondary section (a complete High School) attached to H. H. the Raja's College and is dealt with under the heading "Raja's College." There are three other complete High Schools preparing pupils for the Public Examination held by the Government of Madras under the Secondary School Certificate scheme, and eleven Lower Secondary Schools. The Lower Secondary School in the Town chery is reserved for pupils of the Adi-Dravida and other backward communities. Pupils in all the Lower Secondary Schools, except that at Tirugókarnam, are taught free; and deserving pupils of both the Rani's Free High School for girls and the Adi-Dravida School in the Town chery are helped by the grant of monthly stipends.

The strength of all the secondary schools on the last day of fasli 1345 was 2,284. The following statement shows the number of pupils in the secondary forms of the State Lower Secondary Schools:—

Álangudi ...	... 70	Kíranur ...	... 40
Annavásal ...	... 50	Mélathániam	... 15
Virálimalai ...	... 29	Arimalam ...	... 39
Karambakkudi	... 63	Town Puducherri (Adi-Dravida)	... 80
Tirugókarnam	... 89		
Tirumayam ...	... 56		

H. H. The Rani's Free High School for Girls.—A girls' school was opened in the Town in 1883 with 13 pupils. Within a year the strength grew to 62. The school was removed in 1891 to a new building in the centre of the town. It was raised to the status of a Lower Secondary School in fasli 1326, and to that of a High School in 1339. It is now staffed with graduates to teach the High School classes, and trained mistresses for the Elementary and Lower Secondary classes. The optional subjects under the Secondary School Leaving Certificate scheme offered by this institution are History, Chemistry and Botany. Music, clothes-making and embroidery are taught in all the classes. Religious and moral instruction has been recently introduced. The strength of the school in 1935–36 was 378.

The Church of Sweden Mission High School.—The history of this school has been briefly dealt with under "Christian Missions" in Chapter III. The pupils are taught History, Algebra and Geometry and Chemistry under the C-group of the Secondary School-Leaving Certificate course. Moral and religious instruction is also given. The total strength of the school in 1935–36 was 307 classified as follows:—

Hindus	238
Christians	49
Muhammadans ...	9
Depressed Classes ...	11
Total ...	307

The staff consists of a Headmaster, 6 graduates, 7 trained teachers, Manual Training, Drill and Drawing Instructors and Pandits. In 1935–36, there were 28 boarders receiving free instruction in the school hostel. 47 other pupils were granted concessions in regard to fees. The cost of such concessions amounted to Rs. 840 or roughly 1/5 of the fee income of the school.

The school has a good record in Scouting and Sports. In 1935-36 it received State grants amounting to Rs. 2,200.

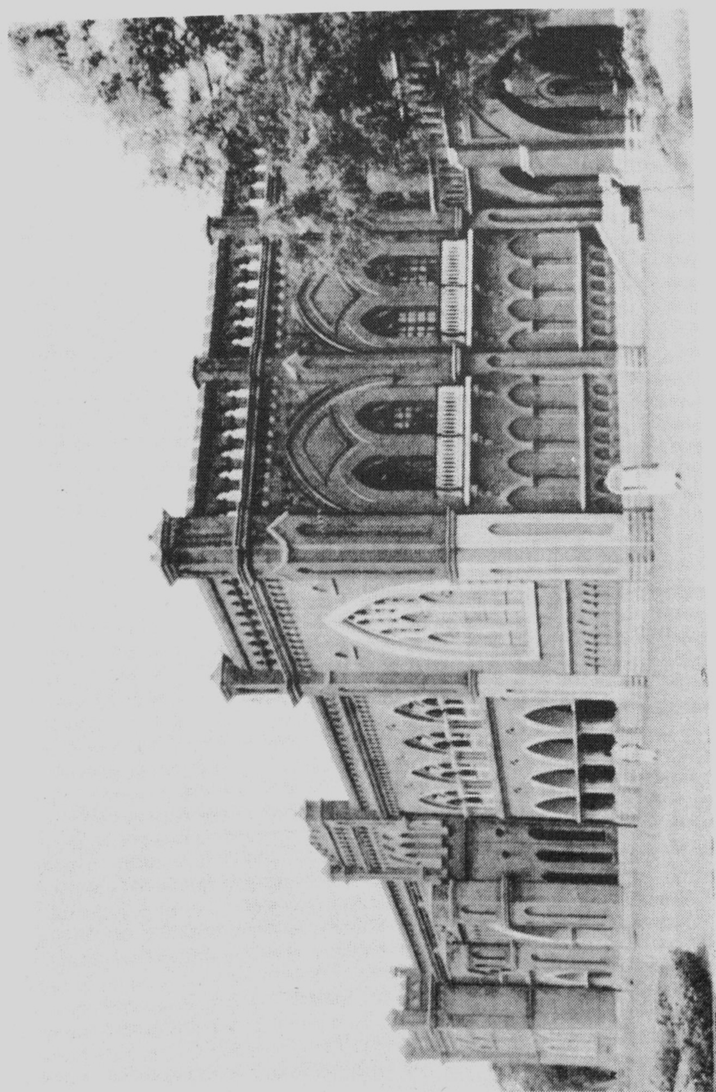
The Sri Bhumeeswaraswami High School, Ramachandrapuram.—This school owes its existence to the munificence of Mr. S. T. Nagappa Chettiar, who has provided it with a a spacious and substantial building. It was opened in fasli 1327, and was soon raised to the status of a High School. History, Geometry and Algebra, and Physics are the special subjects taught in forms V and VI. There were 380 pupils on the rolls in fasli 1345, distributed as follows:—

Hindus ...	...	... 343
Christians	...	... 26
Muhammadans	...	... 4
Depressed Classes	...	... 7
	Total	... 380

The staff consists of a Headmaster, 3 graduates, an undergraduate, 3 Secondary Grade trained men, 2 Pandits and a Drawing Master. This was originally a free school, but fees are now levied. 32 pupils were granted concessions in respect of fees in fasli 1345. The school has been successful in Sports. The State grants disbursed to the Secondary section of this institution in 1935—36 amounted to Rs. 1,716.

Sri Satyamurti Secondary School, Tirumayam.—The late Dewan Bahadur T. N. Muthiah Chettiar of Ramachandrapuram took over the management of the National Secondary School at Tirumayam, and shifted it in 1924 to its present extensive building which he constructed. The school was called the Sri Satyamúrti Secondary School and was raised to a High School in 1927. But financial difficulties prevented its continuance as a High School, and the Chettiar handed it over to the Darbar in 1931. The school now works as a Lower Secondary School and had 344 pupils on its rolls in 1935—36 including those in the elementary section.

Collegiate Education, H. H. The Raja's College.—The premier educational institution in the State is H. H. The Raja's College at the capital which owes its origin to an Anglo-Vernacular school started in 1857 under the title 'Maharaja's



Free school', and maintained out of the State charity funds. From 1866, a nominal fee was collected to ensure regularity among the scholars, but the amount thus realised was returned in the shape of books, *etc.*, supplied to the pupils. In 1868, the pupils numberd only 68, and since even these were ill-classified, and ill-taught, Mr. Caldwell, an Inspector of Schools in the Madras Presidency was requested in 1875 to inspect the school and suggest means of improving it. Under his advice presumably, a graduate Head-master was appointed in 1878. This was the turning-point in the history of the Institution. The school which had hitherto taught only up to the fifth Form was remodelled and re-classified, and the curriculum revised to suit the Matriculation standard. The strength soon rose to 300, and a new building was erected at a cost of Rs. 14,000 and formally opened in March 1879 "in the presence of His Excellency the Raja, Mr. Sewell, Political Agent" and others, "when His Excellency was pleased to enter his own grandson as a student". In 1880, the school sent up candidates to the Matriculation examination for the first time, and the College department was opened and affiliated to the Madras University. The school having again outgrown its accommodation, surrounding houses and sites were occupied, an upper story was erected over the main building, and the lowest classes were disbanded or handed over to private agencies. When, in 1880, the accommodation once more proved insufficient it was resolved to build a fine edifice in an airy locality outside the town. This building was commenced in August 1888 and completed and occupied in 1891. It was originally rectangular but after the addition of the Chemistry and Engineering laboratories with a spacious hall above them, it is now T shaped. It includes a hall adapted for use as a Theatre in which the library is located. It has an extensive compound, and spacious play-grounds, and in point of accommodation, and surroundings it is now one of the best school-houses in Southern India, thanks mainly to the progressive policy of the late Sir A. Sashia Sastriar.

The College was reorganised between 1908 and 1910 to suit the remodelled courses of Secondary and University education. It now prepares pupils for the Madras Government Secondary School-Leaving Certificate and the Madras University Intermediate Examinations; but till 1920, Collegiate instruction was confined to History and there was no 'modern side.' In 1921, a new Laboratory was built, and the teaching of science was introduced. The year 1928 saw the opening of Engineering courses, and in the following year, a workshop was constructed. In addition to the Intermediate course in Electrical-Engineering, there is now a Minor Engineering course to provide a short professional course for pupils who do not intend to take a University course. In 1935, Commercial Classes preparing pupils for the Madras Technical Examinations were opened. In the same year, instruction in Agriculture was introduced. The College owes its initial success to a succession of eminent Principals and Professors among whom may be mentioned the late Mr. S. Narayanaswamy Aiyar, the pioneer of English education in the State, and those versatile scholars, the late Messrs. S. Radhakrishna Aiyar, B. V. Kameswara Aiyar and S. T. Ramachandra Sastriar. Its expansion after 1920 is due to the untiring energy of Rao Saheb N. Thiagaraja Aiyar the present Principal.

In addition to English (Part I of the Intermediate course), and a Second Language,—Sanskrit or Tamil (Part II), there are courses in the college under Part III in Mathematics, Physics, Chemistry, Electrical Engineering, Modern History, Indian History and Logic. The optional subjects taught in the High School for the Secondary School Leaving Certificate examination are Algebra and Geometry, Chemistry, Physics, History, Typewriting, Book-keeping and Agriculture. Carpentry, gardening and Sloyd form the manual side of instruction. Religious and moral instruction is imparted in all the classes and to all communities and sects.

The strength of the institution in fasli 1345 was as follows :—

Section.	Hindus.	Christians.	Muhammadans.	Adi-Dravidas.	Total.
Intermediate ...	94	4	1	...	99
High School ...	404	16	14	9	443
Lower Secondary ...	348	6	20	...	374
Total ...	846	26	35	9	916

The staff consists of the Principal, two Headmasters (High School and Lower Secondary), seven Lecturers and two Tutors for the University Classes, ten Assistants for the High School and eleven teachers for the Lower Secondary section, besides five Pandits, a Physical Director, a Physical Instructor, a Sloyd Master and a Carpentry Instructor. In addition to the permanent staff, 9 graduates hold temporary appointments.

State Aid to pupils.—In fasli 1345, 72 pupils were admitted as free boarders and free scholars, 26 received stipends in addition to free tuition, and 211 enjoyed concessions in respect of fees. The number of pupils receiving State Aid of any description arranged according to community are as follows :—

Description.	Brahmins.	Non-Brahmins Caste Hindus.	Adi-Dravida and Backward classes.	Muhammadans.	Christians.	Total.
Free Boarders...	11	34	12	4	11	72
Stipendiaries ...	5	3	15	3	...	26
Free Scholars ...	56	51	93	23	11	234

There are eight private endowments, which provided 10 pupils with scholarships in 1935–36.

The College has completely equipped laboratories for Physics and Chemistry and Electrical Engineering. The High School section has separate laboratories for Physics and Chemistry. There is a workshop attached to the laboratories, where carpentry is taught. In 1935–36, the cost of maintaining all the laboratories exceeded Rs. 2,500.

Library and Reading room.—The Library is divided into three sections—the College, the High School and the Lower Secondary. On June 30, 1936, there were 6,625 volumes in the College, 3,404 in the High School, and 4,890 in the Lower Secondary sections respectively. The Reading Room takes in 147 periodicals, foreign and Indian, English and Tamil. There is also a Reading Room attached to the Hostels.

Hostel.—The College maintains three Hostels—Vegetarian, Non-Vegetarian and Adi-Dravida. The Vegetarian Hostel was opened in 1923 to the east of the College buildings, the non-vegetarian section, in 1928 in the Aiyar's Palace just to the south of the Branch School building, and the Adi-Dravida section in 1935. In 1935–36, there were 121 boarders, of whom 72 were fed free. The average monthly charges for paying-boarders are about Rs. 12 in the Vegetarian and Rs. 8 in the Non-Vegetarian Section. The monthly charges incurred per head of the free boarders amount to about Rs. 10 in the vegetarian, Rs. 8 in the non-vegetarian, and Rs. 10 in the Adi-Dravida Sections. The Principal is the Warden of the Hostels, and he is assisted by a lecturer who is the resident Superintendent and a master who is in separate charge of the non-vegetarian section.

The college has extensive and well laid-out play-grounds in close vicinity. In 1931, the scheme of physical education was reorganised and made an integral part of the school work. A Physical Director trained at the Y. M. C. A. College of Physical Education, Madras, is in charge of sports. Tennis, Football, Cricket, Hockey, Volley Ball, Basket Ball, Ring Tennis, Playground Ball, Badminton and Pingpong are played. A coach was recently appointed to train pupils in Cricket. There is a good Sports Pavilion on the ground. Mrs. Holdsworth laid the foundation stone of this building in December 1933, and it was opened in November 1934, by Sir Alexander Tottenham. The expenses of sports are met from the annual Darbar grant of Rs. 600 and from subscriptions from pupils exceeding Rs. 2,000 a year.

There are at present three Scout troops in the College.

Finance.—The following table shows the receipts and expenditure of the College in 1935—1936:—

	Receipts.	Expenditure.
College Section	4,523	29.296
High School Section Etc. ...	14,421	40.396

Extra-curricular activities.—There are 11 Students' Associations, 4 in the College and 7 in the High School and Lower Secondary Sections. Special lectures on cultural and religious topics are delivered periodically. About 20 were delivered in 1935–36. The College Magazine was started in 1933, and publishes contributions in English, Sanskrit and Tamil from teachers and students, both past and present. A recent feature is the annual educational conference first organised on the occasion of the Golden Jubilee of the College to discuss new and improved methods of teaching, and also to focus public interest and attention on the activities of the institution and their results. It is attended by all the teachers in the State.

General.—The University Commission inspected the College in 1906, 1910, 1918 and 1928 and their reports have been uniformly favourable. The College celebrated its Golden Jubilee in 1934. The celebrations began on November 30th and lasted for three days. They were inaugurated by His Highness the Raja assisted by the Administrator, Sir Alexander Tottenham. The Assistant Administrator, Rao Saheb R. Krishnamachariar, opened the Teachers' Conference forming part of the Jubilee programme, over which Rev. Father P. Carty S. J. of St. Joseph's College, Trichinopoly presided. On the concluding day, there was a general meeting of the staff, the old boys and the present students of the College, presided over by Rao Bahadur K. V. Rengaswami Aiyangar of Trivandrum. In his speech the Administrator paid the following tribute to the College.—

"A College is what its alumni are; its reputation is bound up with that of its sons and daughters. Judged by this standard, this College may well be proud of its work. It has manned practically all the State services from top to bottom, and the

high level of efficiency that distinguishes the State Public Service to-day affords practical evidence of the meritorious service that the College has rendered to the community at large. It has produced men who have filled the highest offices in the State, such as the late Vijaya Raghunatha Durai Rajah, who for a period of 30 years, as Councillor, Dewan and Regent, carried on the administration with conspicuous ability, Rao Sahib G. Ganapati Sastriar, formerly Dewan, and Mr. R. Krishnamachariar, the present Assistant Administrator.

"It is no mere fanciful belief that each educational institution leaves an impress of its own upon its pupils. It pleases one to think that the hall-mark that the Maharaja's College, Pudukkottai, impresses on its alumni is reliability and a sense of duty."

Sanskrit and Tamil learning.

The Véda Sástra Pátasálá.—With the help of a fund called the Manóvirthi Jágír surplus chatram Fund a Sanskrit school was opened in 1894 with the sonorous designation Vàṇi Vilàsa Véda Sàstra Pàtasàlà, with a view to revive and foster oriental studies. To this was affiliated the Palace oriental library or Sarasvati mahàl containing rare works in cadjan. The School was first located at Tirugókarnam and is now held in the old Palace.

Swayampákams (or doles of rice) were at first given to poor students. In fasli 1326, this system was discontinued and pupils were fed and lodged free. In the same year, English was introduced as an optional subject. As an experimental measure the institution was raised to the status of a College to train pupils for the Śirómaṇi Title Examination of the Madras University; but as only one native of the State joined the course, the experiment was given up. The Pàtasàlà was further reorganised in 1926, and instead of free boarding, the pupils are now given stipends. The Pàtasàlà has two sections, one for the study of Véda, and the other for that of Sanskrit Language, Literature, Logic and Philosophy. There were 27 pupils on the rolls of the Pàtasàlà on the last day of fasli 1345.

Dassara Examinations.—The Darbar have instituted examinations in Sanskrit and Tamil held during the Dassara holidays. These are conducted by boards of examiners (one for Sanskrit, one for Tamil and a third for *Ágama* or temple ritual) presided over by the Dewan (now the Assistant Administrator). The Sanskrit Board consists of 22 examiners including six *Sadasyas* (Court Pandits) and sixteen *Vidwáns* (Scholàrs), and the Tamil Board of three *Vidwáns*. Successful candidates are awarded sambàvanas or prizes ranging from Rs. 10 to Rs. 30 in amount. On the average more than Rs. 4,000 per annum is distributed in prizes.

Kalasalas.—In recent times kalàśàlàs or improved Tamil seminaries have sprung up all over the Chettinad. They teach Vernacular literature and grammar, the Indian system of Arithmetic and Hindu Theology and Ethics. The school at Kónàpet has a fine and spacious school house with playground and chapel. The Mélasivalpuri kalàśàlà receives a State grant, and had 126 pupils on its rolls in 1935–36, of whom 29 were girls. These schools hold annual conferences of learned men from all over the country at which a variety of subjects, of literary, religious and social importance are discoursed upon for the benefit of the public.

Normal instruction.—The training of the village teacher has always formed part of the scheme of general education. When School Inspectors were first appointed one of their primary duties was to train the aided school staff. In 1889, the teachers were for the first time brought together for instruction in the art and science of teaching. In 1895, they were again gathered in selected centres "for mutual improvement." A licensing-board was formed in 1901–2 to examine the proficiency of the teaching staff, and some teachers were sent with stipends to Training schools in British India. A sessional training class worked in 1906–7, and in 1908, it developed into a regular Training school with a model section for practical training

located in Tirugókarnam. Subsequently special schools were opened to train teachers belonging to the backward communities. A special Training class for school-mistresses was held in 1910, and for some years there was a separate Adi-Dravida school in the Town Chery.

These special schools were later closed, and the Training School at Tirugókarnam was thrown open to all classes and to both sexes. In 1920, a batch of teachers were instructed in the 'direct method' of teaching English. The Training School trained teachers for the Elementary Higher Grade and Lower Grade Examinations held by the department. The training included a course in Hygiene and Veterinary science, and instruction in practical Agriculture at the State Agricultural Farm. Mainly as a measure of retrenchment the Training School was closed in fasli 1342, but the Darbar hope to re-open it if necessary when finances permit.

The Darbar grant stipends whenever necessary to graduate teachers who take the course for the Licentiate in Teaching Degree of the Madras University, and to under-graduates and S. S. L. C. holders undergoing the Secondary Grade Training in British India.

There are now 17 Teachers' Associations with a total membership of 555; and they hold monthly meetings to discuss special methods of teaching under the guidance of Inspecting Officers.

Education of the Backward Classes.—As far back as 1886, a school for Muhammadans was opened in the town. It is now a flourishing institution teaching Arabic and the Koran in addition to the usual subjects. In 1894, Night schools were opened for the artisan classes, and special schools were started for Adi-Dravidas.

In 1921, there were 11 schools for Muhammadans and 19 for Adi-Dravidas. In 1924, the Adi-Dravida school in the capital was raised to the status of a Lower Secondary School.

This demand for separate institutions for Adi-Dravidas and other backward classes,—for "segregate" schools as they came to be termed in Educational Committee Reports,—resulted, in the words of the Witherill Commission, "in the lack of healthy competition incidental to their shattered condition," and consequently to "inferior tuition," besides tending to emphasise rather than reduce the differences between the "depressed classes" and the other caste Hindus. Since fasli 1339 (1929–30) pupils of this community have been freely admitted into caste schools all over the State. Wherever practicable the separate schools maintained for the education of the Adi-Dravidas have been abolished and the pupils of those schools admitted into the adjoining caste schools. As the result of this policy, against 41 "segregate" schools for Adi-Dravidas in 1928–29, there were only 10 in 1935–36, whilst the number of Adi-Dravida pupils rose from 2,106 in 1928–29 to 4,892 in 1934–35.

The Reclamation school.—This is a residential school for Korava boys. It was first opened at Tirumayam in fasli 1335 and was removed in fasli 1340 to the Olaganàtha Swàmi Matam building near Sandapettai in the capital town. The boys are usually educated up to the Fifth standard, but the more promising receive higher education. Advanced pupils study for the S. S. L. C. examination in the High school. Weaving is taught here. Pupils who do not join the High school learn either fitting, tailoring etc., in the Màrthànda Industrial Institute attached to the Public Works Department, or compounding in the General Hospital, or composing type in the State Press. There are now 39 pupils in the school and they are fed and clothed at State cost.

The orphanage in the Sri Vijaya Raghunàtha Poor Home* is an asylum for destitute children and waifs among whom are boys of the backward communities who study in the College and the Secondary schools in the Town.

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* See under "Vijaya Raghunàtha Poor Home" in the chapter on "Devastanam and Charities."

Vocational Instruction.

The Sri Márthánda Industrial school.—Technical education was started in 1891–2 by sending two State scholars to be trained in the School of Arts and the Engineering College at Madras. The Sri Màrthànda school was opened in February 1896 with classes for wood-carving and carpentry, rattan-work, smithery, making jewellery, painting, electroplating, watch and clock repairing, drawing, tailoring, and printing. Several of the classes have now been closed, and the Institution is now absorbed in the D. P. W. Workshop under the supervision of the State Engineer. It has now 13 apprentices who receive training in carpentry, smithery, tailoring, painting and handling machines.

The State Weaving school.—This was opened in 1910 at Tirugókarnam for the benefit of the Sowràshtra boys at Tiruvappúr which is close by. Students were admitted to learn to make carpets, sheets and towels on flyshuttle-looms and were paid stipends. The school was later transferred to Karambakkudi primarily in order to train the children of the Adi-Dravida cotton weavers in the neighbourhood, but pupils of other castes were also admitted; all were given stipends.

The strength of the school, however, was low and its cost high. It was therefore abolished. The weaving class was first transferred to the Town Chery Secondary school and is now attached to the Reclamation school. Weaving is now taught in the Annavàsal and Tirumayam Secondary schools, and spinning in many elementary schools.

The State Agricultural school.—An Agricultural Demonstration Farm and Training Institute was opened in March 1896, to teach Surveying, Levelling, Mensuration, Agriculture and Hygiene among other subjects. In the same year a Demonstration Dairy Farm was added to it with a view to improve the local cattle and supply good milk to the town. Since these Institutions were found to work at a loss, they were all closed in 1899. The Agricultural Farm was revived in 1911

An Agricultural school was attached to it but was closed a few years later, when Agriculture was made a compulsory subject in the Teachers' Training school.

Passing mention may be made of some short-lived institutions which are now defunct. They are the Srí Ràmachandra Sangita Sàlà which was opened in 1896 and closed in 1898. A small Music school, a private institution called the Mínàkshi Sangita Sàlà has recently been opened in the capital.

Mass Education.—In fasli 1334, the Darbar sanctioned a scheme for the elementary education of adults in a one year course with provision for a 'continuation' course of six months. The scheme also provided for the payment of grants to teachers who conducted these schools. The scheme was in force till fasli 1342, but the results were not gratifying and many of the pupils re-lapsed into illiteracy. Adult education is now imparted through rural libraries, magic lantern lectures, and lectures on rural improvement. In fasli 1345, 390 teachers took part in this work, and the total number of lectures that were delivered including 16 lantern lectures, was 2,269, attended by no less than 67,637 persons.

Libraries.—Before 1911, there were only two libraries in the State, the Saraswati Mahàl which was later attached to the Véda Pàtasàla and the Tamil Library which was amalgamated with the College library. In that year a public library was opened in the Town Hall under the name of the "Union Club." In 1918, under the auspices of the Union Club, the first Reading Room and Library Conference of the State was held with the Regent in the chair. It was then proposed to establish a Central Library in the Town, but the Darbar have not yet been able to find the considerable sum required for the purpose. All the Teachers' Associations in the State have their own libraries, and the Town Teachers' Association library housed in the Silver Hall in the Old Palace and known as the "Sàrada Library" has nearly 3,400 volumes. Six hundred books belonging

to this library are circulated in ten boxes to the Secondary schools for the benefit of their pupils. In fasli 1329, the Education department introduced a system of travelling libraries. Boxes of books are sent out to villages from the office of the Superintendent of Schools; and the rural teachers issue the books to literate villagers, and occasionally gather the villagers together and read to them. In fasli 1333, four women's libraries were opened, one in the Rani's High school, and the other three in each of the taluk centres. There are a number of private libraries, 38 of which receive grants from Government. There is a Central Library Association which organises conferences, exhibitions and lectures during important festivals.

Exhibitions.

The Sri Márthánda Exhibition.—To encourage manual work amongst school children, an educational Exhibition called the 'Sri Saraswati Exhibition' was first organised in 1907, and held for some years in succession. In 1911-2 its scope was extended to include agriculture, industries and fine arts. It was designated the 'Sri Màrthànda Exhibition' and was thrown open to all, so that exhibits were received from such distant places as Poona and Benares. Demonstrations were conducted, and lectures delivered. This enlarged exhibition was held continuously for four years till 1915, when it was closed on account of the war. While it lasted it was largely attended and was very popular.

In 1920, a Historical conference was held in the College in connection with which an exhibition of coins, pictures, charts, documents of historical interest and old implements and weapons, was organised. On the occasion of the Golden Jubilee of the College there was a small Science exhibition in the College Hall. The State Library Association has held a number of Library Exhibitions. A small but interesting exhibition is held every year on the Children's Day celebrated by the General Education Department.

The Children's Guild and the Boy Scout Movement.— In 1916 Mr. B. V. Sankarakameswara Aiyar, the then Superintendent of Schools, organised the Children's Guild with the object of encouraging children to use their hands and eyes and take an interest in some hobby, and to try to be of some use to society. 'Good turns' done by children are recorded in the 'Golden Deed' Register and rewarded. A general meeting of the Guild is held annually, when large numbers of village children spend a day or two in the capital, watch the various competitions and sports, and visit the exhibition which includes school work, the handicraft of pupils and teachers, and educational charts and appliances. Inter-school competitions in sports are held; and the children stage a drama. The Darbar have now ordered that hereafter the Children's Day should be held every year on 23rd June, which is the birthday of His Highness the Raja according to the Christian calendar. The event is one to which pupils and teachers eagerly look forward.

A Volunteer Corps was formed in the College in 1916 for the purpose of training pupils to render social service. This was the nucleus of the Boys Scout Movement in the College. Two years later, a teacher was sent for Scout-Master's training, and on his return a scout troop was formed in the College. A Scout camp was held in 1922—23 to train Scout-Masters; and in 1923, the Pudukkóttai Boys Scout Association was formally inaugurated and affiliated to the Boys Scout Association in India. The Association was slowly extended to the mofussil. In fasli 1339 (1929–30), a scout training camp was held under the direct supervision of the Dewan. In 1930 the Darbar appointed an Organising Secretary for the State. There are at present 29 units with a total membership of 929 including all ranks—Scouters, Scouts, Cubs and Rovers. The groups are mostly attached to schools. His Highness the Raja is the Chief Scout for the State. The scouts render active service during all the important festivals in the State.

Administrative.—While there were still only a few taluk schools to look after, the Head-master of the English school at the capital was entrusted with their supervision. An Inspector was appointed in 1886. He was given two assistants in 1889. The department was under a Director of Instruction from 1895 to 1897 when the post was abolished. The Principal of the College was placed in charge of all the schools in the State till October 1909, as an experimental measure, but since this arrangement did not work well, the department was then placed in charge of an Educational Officer lent by the Madras Government. Subsequently in 1912, an officer in State service was specially trained for the work. The department was reorganised by Mr. B. V. Sankarakameswara Aiyar who was Superintendent till 1929. Under him there were three Inspectors and three Deputy Inspectors. Later the posts of the Deputy Inspectors were abolished and a fourth Inspector was appointed. As a measure of retrenchment one of these has since been abolished. The Principal of the College is in charge of the secondary section attached to it, while the Superintendent of Schools has now control over all the other educational institutions in the State.

State Aid to Pupils.—It has always been the policy of the Darbar to provide scholarships or the higher education of pupils of promise whose parents would otherwise be unable to afford it. Up to 1931, free-scholarships were awarded to deserving pupils in the Raja's College with the proviso that the number should not exceed 8 per cent of the total strength of pupils in each class. A scholarship once granted continued till the pupil left the College, provided that the pupil secured promotion, or if a Non-Brahmin or Muhammadan, was not detained in the same class for more than two years. All Muhammadan pupils had to pay only half admission fees. In the beginning of fasli 1341 the Darbar introduced a more liberal scheme of scholarships. Almost all pupils who belonged to backward communities and were too poor to pay school fees were taught free.

Pupils of special merit or extreme poverty were granted money stipends and free boarding in the College Hostel. The stipends ranged between Rs. 5 and Rs. 10 monthly, and in addition sums of Rs. 30 or Rs. 40 were sometimes given to help a pupil to buy books. In 1933–34, there were 197 non-Brahmin pupils in receipt of State aid. The Darbar revised the scheme in May 1936. Free-scholarships are now awarded only to poor subjects of the State on the basis of the marks obtained at the previous annual examination. The number of scholars is limited to eight per cent of the total number of Brahmin pupils and 50 per cent of the total number of non-Brahmin pupils in the Lower Secondary, High School and College sections. Among non-Brahmins, preference is given first to Adi-Dravidas, next to Muhammadans, and then to pupils of other communities classified as backward. Free-scholarships are continued so long as the holder remains in the College, secures promotion to the next higher class at the end of each year, and is of good conduct and character; but a single failure in the annual examination by a Muhammadan, Adi-Dravida, or member of a backward community does not of itself entail forfeiture of a free-scholarship. Free-scholars who are too poor to maintain themselves at their expense, or at that of their guardian, are given free boarding in the College Hostel up to a number determined by the Darbar from year to year.

In all the State schools except the College and the State Secondary School at Tirugókarnam, education is free. The State also grants stipends to deserving poor pupils of the backward communities in these free schools on the following scale:—

I Form	... Re. 1 a month;
II Form	... Rs. 2 a month;
III Form	... Rs. 3 a month.

Poor and deserving girls of all communities reading in the Rani's Free High school are given stipends on the following scale :—

I Form	... As. 8 a month;
II Form	... Re. 1 a month;
III Form	... Rs. 1–8–0 a month;
IV Form	... Rs. 2 a month;
V Form	... Rs. 2–8–0 a month; and
VI Form	... Rs. 3 a month.

Monthly grants ranging from 1 anna to 4 annas are awarded to girls reading in the Town Muhammadan Girls' school.

Poor and deserving pupils who are natives of the State are often granted stipends to help them to pursue a course of studies for a degree or to qualify for a profession in Colleges and institutions outside the State. In fasli 1345, a State stipendiary school-mistress was undergoing the Secondary grade training and another was studying in the Sàradà Vidyàlaya, Madras, while a third stipendiary was studying in the Queen Mary's College for Women, Madras. The Darbar now contemplate framing definite rules for the grant of stipends to pupils who pursue either a higher course in Arts and Sciences or a professional or technical course outside the State.

Financial.

I Statement of expenditure.

Fasli.	General.	College.
1320	42,308	21,777
1325	68,574	23,968
1330	1,20,447	31,868
1335	1,46,133	41,340
1340	1,20,437	52,604
1341	1,98,980	55,273
1342	1,86,968	62,987
1343	1,80,393	63,526
1344	1,89,298	67,035
1345	1,95,776	59,692

II Statement showing the number of Elementary schools and pupils in the State schools and Aided schools during the last 25 years.

Fasli.	Number of schools			Number of pupils.		
	Total.	State.	Aided.	Total.	Boys.	Girls.
1321 ...	289	130	159	12,441	11,284	1,157
1322 ...	290	145	145	12,818	11,526	1,292
1323 ...	288	164	124	12,524	11,120	1,424
1324 ...	297	167	130	12,199	10,671	1,528
1325 ...	309	170	139	13,063	11,363	1,700
1326 ...	333	181	152	14,049	12,298	1,751
1327 ...	343	182	161	13,918	12,268	1,650
1328 ...	366	193	173	15,905	14,292	1,613
1329 ...	374	202	172	15,531	14,100	1,431
1330 ...	403	218	185	14,743	13,046	1,697
1331 ...	424	243	181	15,875	14,287	1,588
1332 ...	448	285	163	17,818	16,087	1,731
1333 ...	469	297	172	17,850	16,237	1,613
1334 ...	457	296	161	17,002	14,960	2,042
1335 ...	451	294	157	16,888	14,906	1,982
1336 ...	462	297	165	16,417	14,517	1,900
1337 ...	439	300	139	16,180	14,166	2,014
1338 ...	429	298	131	16;528	14,522	2,006
1339 ...	403	269	134	17,179	14,942	2,237
1340 ...	335	242	93	17,990	15,813	2,177
1341 ...	303	233	70	18,925	16,380	2,545
1342 ...	244	177	67	17,910	15,365	2,545
1343 ...	241	175	66	16,648	14,321	2,327
1344 ...	247	166	81	16,416	14,032	2,384
1345 ...	251	167	84	15,316	12,458	2,858

The number of schools, State and aided, which was 289 in fasli 1321 rose to 462 in fasli 1336. From fasli 1337 the number of schools has been steadily declining. This is due to the abolition of single-teacher schools from considerations alike of economy and of efficiency. This policy is in accord with that pursued by the Madras Government under the scheme of centralisation introduced by Mr. Champion. The number of pupils in the State has increased by more than 30 per cent during the last 25 years and it is gratifying to note that the number of girl pupils has increased by more than 100 per cent.

These figures do not include schools that do not receive any aid from the State.

The full effect of the introduction of compulsory elementary education in the State is not to be gauged by these figures. It must be remembered that the Regulation has not been enforced *throughout the State.* The Darbar have been applying it gradually. In fasli 1336, the Regulation was applied for the first time in four centres; in 1337 in three more; in 1338 in 6 more; in 1340, in 49 villages; and in 1345, in 41 centres comprising 103 villages and 49 hamlets. The figures for six years given below indicate the increase in strength in the areas where the Regulation was enforced.

Fasli.		Number of schools working under the Regulation.	Increase in the strength of pupils in these schools.
1336	...	16	803
1337	...	24	883
1338	...	38	1,776
1339	...	56	3,040
1340	...	84	5,156
1341	...	81	6,458

The increase in the average attendance in the schools brought under the operation of the Regulation has been phenomenal as the following figures of fasli 1343 for a few representative centres show:—

School.			Average attendance before the introduction of the Regulation.	Average attendance in fasli 1343.
Alangudi	...	...	85	218
Kíranur	...	...	38	111
Annavásal	...	...	70	167
Kílánilai—Puduppatti		...	42	84
Mánthángudi	...	...	18	32
Puliyur	...	...	25	52
Mélathániyam	...	...	47	97
Ádanakkóttai	...	...	49	92
Virálimalai	...	...	55	138
Kaik[illegible]chi	...	...	30	68

The two evils of premature withdrawal and stagnation of pupils in the lower classes present a serious problem. The Darbar have provided for adequate supervision of the schools and for the appointment of professionally qualified teachers, and have recently ordered a revision of the curriculum so that it may more adequately meet rural needs.

III Statistics of Elementary Education (Boys and Girls) in Pudukkottai State in 1935-36 compared with those for adjoining districts in Madras Presidency.

Districts.	Area.	Number of schools.	Average area served by a school.	Number of pupils.		Percentage of pupils of school-going age (in whole numbers).	
				Boys.	Girls.	Boys.	Girls.
Trichinopoly * ...	4,314	1,536	2·80	71,714	21,032	55	15
Tanjore * ...	3,742	2,302	1·60	1,01,688	35,654	59	19
Madura * ...	4,912	1,606	3·06	84,626	29,068	52	17
Ramnad * ...	4,819	1,671	2·90	85,276	26,837	65	19
Pudukkóttai † ...	1,179	340	3·50	20,838	4,632	73	15

* Elementary Schools under the control of the District Educational Councils.

† State, aided and unaided schools.

CHAPTER XI.

CO-OPERATIVE MOVEMENT.

History of the Movement.—The British India Act X of 1904 was introduced in the State as Regulation III of 1908. The first society to be registered was a credit society at Karambakkudi. On the same day, September 22, 1908, a co-operative store was registered in the capital.

Mr. C. V. Dikshitar, a native of Tanjore, who joined the State service in 1909 and rose to the position of Registrar of the Chief Court, was responsible for forming three societies, a Mutual Benefit Society at Âlangudi in 1909, the Town Bank in 1910, and the Brahadambàl Society in the town, largely for the benefit of the Koravars in municipal employ and menials in State service.

Up to fasli 1322 there were only four Societies. Owing mainly to the sympathetic guidance and labours of two gentlemen, who were keenly interested in co-operation, Mr. J. T. Gwynn, I. C. S. the State Superintendent, and Mr. M. K. Venkatachariar, the Dewan Peishkar, the movement gained in momentum between faslis 1322 and 1326. The British India Act II of 1912 was brought into force in the State. A society was registered in Kíranúr on the basis of unlimited liability. The defunct Tiruvappúr Weavers' Association was revived. The Societies at Karambakkudi and Âlangudi were transferred to the unlimited liability basis. In fasli 1326, 22 societies were working satisfactorily.

The establishment on September 1, 1920 of the Central Co-operative Bank in the Town was a great event in the history of the movement. Up to 1920, the Darbar had been helping the rural banks with loans, supplemented by the Town Bank, but the Central Bank from its foundation took over the financing of the Primary Societies.

The formation of Weavers' Societies in Tiruvappúr, Karambakkudi, Parambur and Seniyapatti, and Co-operative Stores at Sandapettai (Town), Tirumayam, Àlangudi, Karambakkudi, Kíranúr and Viralimalai marks the development of co-operation on the non-credit side. Later two societies for the supply of books and stationery to students were formed,—one for the students of H. H. The Raja's College, and the other known as the Teachers' Mutual Benefit Co-operative Society, for the benefit of the teachers and pupils of the General Education Department. Two Building Societies and a Co-operative Printing Press in the Town are recent additions to this class of societies.

In fasli 1336, three Taluk Unions and the Valnàd Union were started to supervise the work of the Societies. Owing to the difficulty of finding funds and men with the capacity, training and leisure, necessary to carry on the work of the unions efficiently, no further progress has been made in this direction; and these four supervising unions are now in a state of 'suspended animation'

There are now 123 societies comprising the Central Bank, 100 Agricultural Credit Societies, 14 non-Agricultural Societies, 4 local supervising unions, 2 Building Societies, one Labour Union, and one Co-operative Central Institute. Of the 14 non-agricultural societies, 5 are credit societies, 3 Weavers' Unions, 3 Stores Societies, 2 societies for the supply of books and stationery to the students, and one a Co-operative Press. The total number of members in all the societies excepting the Central Bank, the State Co-operative Institute, and the Supervising Unions on June 30, 1936, was 11,654 of whom 2,184 were Brahmins, 7,149 non-Brahmin caste Hindus, 528 Christians, 708 Muhammadans, 807 Adi-Dravidas, and 8 of other castes. Of the 105 credit societies, only 34 were issuing fresh loans, while the others confined themselves to the collection of old arrears. These 34 societies issued loans to the amount of Rs. 3,44,710 in fasli 1345.

All the five 'Purchase and Sale' Societies, including the College Co-operative Society and the Teachers' Mutual Benefit Society, are working satisfactorily. The Weavers' Societies at Karambakkudi and Parambur are on the verge of liquidation, but the Tiruvappúr Weavers' Union is functioning well and has recently opened a Sales Depót. The Labour Union at Vayalogam was placed under the charge of a Supervisor superseding the managing committee in fasli 1345. The Building Societies are working satisfactorily; one of them, the Government Servants' Building Co-operative Society, borrowed Rs. 7,250 from the Government in fasli 1345 and disbursed loans to the amount of Rs. 8,400. The Co-operative Press is a popular institution.

The Central Bank.-This was opened in fasli 1330 (1920-21), and has taken over from the Town Bank the financing of the Primary Societies. As a financing bank it inspects the working of the societies indebted to it. It now owns a building in the town worth Rs. 12,000.

The progress of this bank during the last fifteen years is shown below:—

Fasli.	Number of members.		Paid up share capital.	Deposits held.	Loans due from Societies.	Net Profit.	Reserve Fund.	Loans advanced in the fasli.	Loans collected in the fasli.
	Individual.	Societies.							
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1330	16	27	3,570	7,532	9,150	230	68	...	100
1335	18	109	26,910	3,37,135	2,88,989	4,247	3,756	1,35,170	44,907
1340	22	134	62,672	4,88,420	3,39,097	8,759	14,172	54,454	80,585
1344	18	114	58,602	2,98,901	2,26,378	6,108	18,982	74,941	72,530
1345	15	115	58,802	2,51,590	2,20,727	5,592	20,379*	72,561	75,506

* Not audited.

The Central Bank has now decided to appoint an Executive Officer to scrutinize the loans outstanding from rural societies with a view to their early collection, and to attend to the work of rectifying rural societies.

The Town Bank—This Bank was registered in May 1910 on the model of the Urban Banks in the Madras Presidency. It was housed in a rented building till 1921, then in its own building in East Second Street, and finally in 1925, it was shifted to its present spacious habitation in East Main Street.

From the first the Bank has had the support of the Darbar. When it was started, the Darbar helped it with a loan of Rs. 2,000 which was repaid in 10 equal annual instalments without interest. Later, the Bank obtained large concessions from the Darbar, for instance, permission to draw overdrafts on and to deposit its Reserve Funds in the State treasury. Up to 1920, it financed the Rural Societies and has lent to them to the extent of Rs. 94,000. It has succeeded to a remarkable extent in winning the confidence of the public and thereby attracting large deposits which have helped it to lay by a large reserve fund. Its Common Good Fund is to be utilised to start a public library. A free Reading Room has already been opened. Its rate of interest on loans is now 6¼ per cent, the lowest obtaining anywhere in the Presidency. It is able to attract fixed deposits at 2 per cent. The Bank has current accounts with the Co-operative Central Banks at a number of important cities in British India, and issues and discounts cheques at these places for approved customers. It collects money for companies on bills and drafts. It has invested nearly 4 lakhs of rupees in Government Bonds and in other Co-operative Banks. Registrars of Co-operative Societies in Madras, the successive Dewans and Administrators of the State, and many leading co-operators have visited the Bank, and have uniformly testified to its efficiency and utility. Reviewing the work

of the co-operative societies in the State in their Proceedings dated October 20, 1934, the Darbar expressed their satisfaction with the work of the Town Bank as follows:

> "The only bright spot in this gloomy picture is the Pudukkóttai Town Bank Ltd., which continues to be so popular that, in spite of a reduction in the rate of interest, its deposits increased and the net profit earned was nearly double that of the previous fasli."

Officials and non-officials are on the Board of Management; and have always worked amicably together. The Bank formerly enjoyed the privilege of electing a member to the Representative Assembly, but this was withdrawn when the Legislative Council was constituted.

The Bank celebrated its Silver Jubilee in July 1935. The Administrator of the State inaugurated the celebrations, which were presided over by the Right Honourable V. S. Srinivasa Sastriar, P. C. Tributes were paid to the Bank and its energetic Secretary, Mr. G. Sundaresa Aiyar, by the Darbar, the public of Pudukkóttai, and leading co-operators in British India.

The following statement shows the progress of the Bank:—

Progressive Statement of the Town Bank Ltd., Pudukkottai.

Fasli.	Number of members on rolls.	Paid up share capital.	Deposits and borrowings.	Loans outstanding from members.	Net profits.	Reserve Fund.
		Rs.	Rs.	Rs.	Rs.	Rs.
1320 ...	180	724	4,439	5,039	256	156
1325 ...	961	4,693	80,847	76,821	2,347	4,086
1330 ...	1,262	7,621	1,40,973	1,36,959	4,589	11,573
1335 ...	2,020	12,795	4,00,777	2,31,792	11,664	30,376
1340 ...	2,387	14,584	5,55,639	2,52,856	15,540	72,648
1344 ...	2,090	13,810	7,75,998	3,25,472	15,749	1,15,856
1345 ...	2,180	13,850	9,88,995	3,31,234	18,806	1,20,558

		Rs.
Value of the Building purchased from Building Fund	...	13,823
Unspent balance of Building Fund	... ...	13,932
Common Good Fund	... ...	10,927

Co-operative Education and Dissemination of Co-operative Principles.—In the early years of the movement, the Darbar sent officials and non-official delegates to attend the annual Co-operative Conferences at Madras. From the outset of its career the Town Bank has arranged for the delivery of periodical lectures on co-operation. Among the first to deliver such lectures was the late Dewan Bahadur L. D. Swamikannu Pillai who was followed by a number of other distinguished co-operators.

In fasli 1328, Mr. F. R. Hemingway, I. C. S., Registrar of Co-operative Societies, visited the State and presided over the first State Co-operative Conference at Kíranúr. Rao Bahadur A. Vedachala Aiyar presided over a conference in Fasli 1336; and Mr. H. M. Hood I. C. S., over another in 1339. Registrars of Co-operative Societies in Madras, such as Mr. H. M. Hood, I. C. S., Mr. D. N. Strathie, I. C. S., and Mr. T. Austin, I. C. S., have inspected the co-operative societies in the State, discussed questions pertaining to the progress of the movement, and favoured the Darbar and the public with their views. Dewan Bahadur K. Devasikhamani Mudaliar presided over a Co-operative Conference held at Viràlimalai in February 1936. Six Co-operative Conferences have been held in the State so far.

The State Co-operative Institute has for its objects the following among others:—

1. Studying and propagating the principles of co-operation and serving as the centre for every sort of co-operative activity in the State;

2. Organising special types of societies;

3. Serving as the recognised exponent of non-official co-operative opinion in the State;

4. Convening conferences and exhibitions and arranging for public lectures;

5. Organising and promoting rural welfare schemes and studying economic problems in order to find out ways for rural improvement; and

6. Such other work as will promote the interests of co-operation in the State.

From fasli 1337 onwards, the Institute has been steadily attending to this programme. It organised a training class for the Secretaries of Societies. For some years it published a bi-monthly magazine on Co-operation and Agriculture. It has organised periodical conferences and lectures. It has recently drawn up a programme of rural improvement work to be carried on by its members, and has appointed a full time officer to attend to it as an experimental measure.

Administrative Control, Inspection and Audit.—The societies were inspected and audited by the Dewan Peishkar and his revenue staff till fasli 1325 when a full time Inspector of Co-operative Societies was appointed. The Dewan Peishkar was for some years assisted by an Honorary Assistant Registrar who inspected the Societies in the Àlangudi Taluk. In 1329, the control of the department was transferred to the District Registrar, who became District Registrar *cum* Registrar of Co-operative Societies. Between 1332 and 1335, the Superintendent of Schools was in charge of the department, and then it was transferred to the control of the Development Officer. With effect from June 1, 1932, (fasli 1341), the Dewan Peishkar became the Registrar of Co-operative Societies, and he is now assisted by a Deputy Registrar who is invested with all the powers of a Registrar. In April 1931, a deputation of leading co-operators waited on the Darbar to discuss the steps to be taken to secure effective audit and supervision of the societies; and in pursuance of the decisions arrived at, Audit was separated from Inspection. The Co-operative Inspectors audit while the Supervisors of the Central Bank inspect. There are four Inspectors who also attend to the attachment and sale of movables in their respective jurisdictions.

General.—The credit side of co-operation alone has received attention so far; and the movement in the State has scarcely done anything to foster production and proper distribution. The movement has not even touched the fringe of Agricultural Co-operation. The State Administration Report for fasli 1333 lays down the lines of work for 'Distributive' Societies; for instance, the movement may do something by way of joint sale of the ryots' crops such as ground-nuts, and cotton, and joint purchase of manure and seeds for distribution among ryots.

Owing to frequent failure of crops, the general economic depression and the fall in prices, the indebtedness of the ryots has increased. Members became defaulters, societies had to be liquidated, and the loans advanced by the Central Bank remain unpaid. At the close of fasli 1345, the Central Bank had the large sum of Rs. 2,23,433 outstanding, 60 per cent of which was overdue. This has created a problem which is engaging the attention of the Darbar. They have often reminded members of Co-operative Societies that the principle underlying the movement is for individuals and isolated groups of people to combine and to bring to that union a mutual responsibility which serves as a basis for security and widens their range of credit to an extent that individually the members could not command. This, as has been often pointed out by the Darbar, entails upon every member the obligation to pay his dues regularly, and upon the Society the need for examining carefully the purpose of every loan to ensure that it is productive and consistent with the principle of thrift for which the movement stands, and only advancing loans on proper security. The Darbar have frequently insisted that it is not the object of rural co-operative societies to take over the prior debts of the members in their entirety, but to advance money against occasional agricultural needs and help to improve the productive capacity of the members, and thereby not only recover the monies advanced but help the ryot to liquidate his prior debt by means of improved production. To guard against

default, Dr. Hatch has suggested the need for "all-the-way supervision" from the time of advancing each loan till it is repaid. As a measure of relief to the borrowers, the department has advised societies to waive penal interest under certain conditions while collecting outstanding loans; and 14 societies have followed this advice. The Administrator in his opening speech at the Viràlimalai Co-operative Conference, pointed out that co-operators must realise their responsibilities and not rely on the machinery of the department, but "on their own will to help themselves and their determination to be thrifty and honest."

Statement showing the progress of the movement in the State.

Fasli.	Year.	Number of societies.	Number of members.	Share capital in rupees.	Working capital in rupees.	Reserve Fund of Societies in rupees.	Deposits in rupees.
1320	1910-11	4	...	...	...	...	...
1321	1911-12	4	...	...	...	...	...
1322	1912-13	5	...	...	...	...	...
1323	1913-14	11	...	...	...	...	...
1324	1914-15	14	2,355	...	1,05,636	7,073	69,139
1325	1915-16	21	3,268	13,526	1,82,040	11,032	1,24,437
1326	1916-17	22	4,102	15,597	3,78,637	14,677	94,705
1327	1917-18	27	4,930	15,613	1,77,895	18,112	97,634
1328	1918-19	30	5,630	23,434	2,19,639	19,429	1,32,911
1329	1919-20	35	6,186	27,982	2,63,500	23,515	1,66,403
1330	1920-21	40	6,683	35,630	2,73,727	26,229	1,66,447
1331	1921-22	45	7,472	42,788	3,64,324	29,929	2,43,628
1332	1922-23	61	8,612	56,714	5,04,863	37,252	3,07,296
1333	1923-24	79	9,177	76,144	6,89,944	43,678	4,13,216
1334	1924-25	98	10,595	89,746	8,09,061	52,820	4,33,393
1335	1925-26	118	11,348	1,04,854	11,37,980	60,493	7,14,225
1336	1926-27	132	13,997	1,37,772	13,90,901	78,423	9,01,241
1337	1927-28	143	14,644	1,51,168	15,85,392	97,619	9,37,537
1338	1928-29	144	15,137	1,71,572	16,82,800	1,15,370	8,38,852
1339	1929-30	148	15,087	1,81,039	18,06,389	1,35,812	9,22,240
1340	1930-31	148	13,449	1,80,917	18,41,613	1,68,777	9,65,436
1341	1931-32	148	14,493	1,86,086	20,72,981	1,90,471	11,52,706
1342	1932-33	132	12,013	1,68,546	20,55,903	1,82,101	12,70,267
1343	1933-34	128	11,859	1,70,027	19,09,227	2,38,850	12,22,899
1344	1934-35	123	11,653	1,11,821	15,22,053	2,47,931	9,47,182
1345	1935-36	123	11,654	1,13,624	17,78,754	2,63,261	11,73,383

CHAPTER XII.

LOCAL SELF-GOVERNMENT.

SECTION I.—PUDUKKOTTAI MUNICIPALITY.

'Municipal' activities before the creation of the Municipality itself.—The modern town of Pudukkóttai is now about 200 years old. It originally consisted of irregular streets and narrow lanes of mud-built thatched houses. Just a century after its origin, it was almost entirely destroyed by fire, and, thanks to the wisdom of Raja Vijaya Raghunatha and Major Blackburne, the new town that was built partly from private funds and partly with the help of a State subsidy of 3,000 pagodas distributed to the poor, was well laid out with broad streets. Again, incourse of time deterioration set in; encroachments marred the rectilinear layout; drains became stagnant pools of congestion responsible for constant outbreaks of cholera and other epidemics; and the tanks on which the town entirely depended for its supplies of drinking water silted up and became breeding grounds for guineaworm and other diseases.

Between 1880 and 1894 Sir Sashia Sàstriar, carried out a fourfold programme of town improvement, namely, improved conservancy, town extension, tank restoration and erection of public buildings.

In 1880, street lighting was introduced for the first time; and an optional scavenging cess was levied. Streets were swept daily and drains cleaned. A systematic crusade was carried on against prickly-pear, dense growths of which in and around the Town harboured deadly snakes. Projecting houses and sites were acquired, and the streets widened and realigned. The weekly market which had previously been held on the roads and their margins was removed to a tope where long lines of sheds and booths were put up for the traders.

The old insanitary Paracheri, was razed to the ground, and the present Cheri (Puducheri) was formed in 1888, with regular

streets laid out on an extensive, airy high ground to the east of the town. Similarly on the south-west Raghunathapuram, a suburb for the Valaiyans, grew up with broad regular streets and back lanes.

The cleansing of the tanks was carried out with equal foresight and vigour. The Pallavan tank (Sivaganga) dried up in the drought of 1884–85. This gave Sir Sashia an opportunity too good to be missed. He summoned all the labour he possibly could from all parts of the State in batches of thousands, and each batch worked for three days in succession after which it was relieved. All the slush and silt were removed and the tank renovated. In 1889, the improvement of the Pudukulam was taken up and completed after seven years of labour. When completed it was found to render a scheme of waterworks for the town practicable.

An account of the buildings constructed by Sir Sashia is given in the Gazetteer.

The constitution of the Municipality.—The question of constituting the town a Municipality was mooted in 1907–08. But the townsmen whom it concerned were not alive to its importance, and showed some hostility to the proposal, preferring the material advantages of practical immunity from special municipal taxation to the problematical privileges of self-government. The municipality was brought into existence in April 1912 under Regulation I of 1912. The Municipal Council was originally composed of eight nominated members, chosen from officials and non-officials in equal numbers and presided over by a paid chairman.

Two seats were thrown open to election after 1913; three in 1916–17; and four in 1917–18. In 1924, the strength of the Council was raised from 8 to 12, of whom four were nominated and eight elected. The municipality was at first divided into two wards, then into four, and still later into eight. Under Regulation IX of 1930 which amended and revised the original Regulation I of 1912, the municipality was divided into

12 wards, each represented by one elected member Four members are at present nominated by the Darbar, of whom one is a non-official and the other three are expert advisers such as the Chief Medical officer, the State Engineer and the State Vakil. The Council now consists of 16 members besides the Chairman who is a Government official.

The municipality comprises the town and its four suburbs— Tirugókarnam, Tiruvappur, Màlaedu and Pichathàmpatti covering a total area of 5 square miles and containing a population of 28,776 according to the census of 1931. With the help of large contributions from the Darbar, and owing to the fact that it spends nothing on education or with one small exception, on medical relief, it has accumulated a very substantial reserve which is now being wisely expended. The amount contributed by the Government in 1935-36 was Rs. 43,333. In 1935-36 its revenue from rents, rates and other sources, including the Government contribution amounted to Rs. 1,43,923.

It spent in 1935-36 Rs. 22,446 on roads, streets and lanes; Rs. 43,640 on water-works, Rs. 14,979 on lighting, etc.; Rs. 42,671 on drainage (new works and maintenance); and Rs. 26,527 on sanitation and public health.

Public Amenities.—The municipality has built a vegetable and meat market and two slaughter houses, one for sheep north of Sandapettai, and the other for bulls near Puducheri. It has a number of cartstands, the largest of which is that for motor buses and hackney carriages near the Hanumarkoil adjoining the Public Offices. After the advent of the Electric Supply Corporation * all the principal streets and lanes in the

* The Darbar have granted permission to the Trichinopoly—Srirangam Electric Supply Corporation Limited, Trichinopoly, to sell energy generated at Pykara and Mettur to the Pudukkóttai Electric Supply Corporation Limited, and the Ponnamarávati Electric Supply Corporation Limited, and to lay high tension transmission lines in the State from Manappárai in Trichinopoly District to Virálimalai in the State, and from Kolattúr in the same district to Virálimalai, Annavasal and Pudukkóttai. The Ponnamarávati Electric Supply Corporation is likely to lay high tension lines from Pudukkóttai to Ponnamarávathi via Nachándupatti.

town proper have been lighted by electricity. It is now proposed to supply electricity to Tirugókarnam. The total mileage of streets lighted is 46¾.

The municipality has laid out a small public garden called the Holdsworth park after Mr. B. G. Holdsworth, I. C. S. who was Administrator of the State in 1931-33 near the Jubilee arch. In the centre of this garden rises a clock-tower in reinforced concrete. Three free reading rooms have been opened, one in the Municipal Office, another in Sandapettai and the third in Tirugókarnam. The municipality subsidises the wards for infectious diseases in the General Hospital by meeting the cost of constructing and maintaining the sheds and of the establishment necessary for them.

Town Conservancy.—In early times the conservancy of the town was in the hands of the Karbar (as the Dewan Peishkar was then designated). It was subsequently transferred to the town Sub-Magistrate, and in 1886 an Inspector was appointed to look after street lighting and sweeping, house scavenging, and tank conservation. In 1903, a Sanitary Board was constituted with the Dewan Peishkar as the President, and the State Engineer and the Chief Medical Officer as members. The Treasury Officer and the Superintendent of Salt and Abkari were included later. The Board maintained a full-time paid Secretary to carry out its instructions. It was in existence for nine years and did some useful work. It undertook and carried out a programme of building culverts and revetments, improved slums and arranged for town extensions.

The town is now divided into three wards, each under a sanitary staff with an Inspector at its head. All the streets are swept once daily and the important ones twice. Rubbish and night-soil are removed to a depot outside the town. Public latrines and urinals have been provided in a number of places, and temporary ones are put up during the Dussara festival. The municipality has a fire engine, which is also used as a water-cart.

A temporary sanitary staff is appointed every year during the Dussara festival when elaborate sanitary arrangements are made to keep the town clean and prevent the outbreak of cholera and other epidemics.

Drainage.—Owing to the natural slope of the ground from East to West, the Town has always been fairly well drained, and periodically cleansed at times of heavy rain fall. In dry weather there was always a tendency for insanitary pools of foul water to accumulate in the back yards of houses. In 1895 arrangements were made for the first time to bale these out and dispose of their contents outside the Town.

A lakh of Rupees was sanctioned in 1913 by His Highness the late Raja for the construction of regular drains, and a scheme was drawn up under the expert advice of Mr. W. Hutton, A. M. I. C. E., Sanitary Engineer to the Government of Madras. The general description of the scheme recommended by Mr. Hutton may be given in his own words:—

"The system of drainage I recommend after a careful study of the circumstances of the town of Pudukkóttai is the open drainage system which in Pudukkóttai will consist in the opening out of conservancy lanes where these do not exist at present between back to back house compounds, the provision of open drains one on each side of these conservancy lanes to lead the sullage water to the end of the lane where it would join the open drain in the main street. The main street drains will discharge into an intercepting sewer on the south of the town and running from East to West to the point where the storm water drainage of the town at present reaches the foreshore of the Kattupudukulam. Here a gravitation sewer would convey the sullage to a sewage farm located south-east of the town. This system of drainage would require considerable flushing to keep it in a satisfactory condition, and to provide this, as the pipe water supply is so deficient, a system of masonry flush tanks supplied with water from wells by means of hand pumps is provided in the scheme."

The execution of the scheme was entrusted to the State Engineer. An officer was appointed to acquire lands for the conservancy lanes. The construction of intercepting sewers and gravitation sewers, and the opening of conservancy lanes with drains were taken up in the eastern part of the town and finished in 1926 at a cost of about Rs. 1,88,000. An annual expenditure of about Rs. 2,000 is being incurred on the maintenance of these works. Six years later in 1932, on the advice of the Darbar, the municipality took up the extension of the scheme to the other parts of the town. The block just to the west of the East Main Street was taken up, and in 1932–33, drains were constructed in it at a cost of Rs. 52,000. Work in the northern part of the Town has now begun.

The sullage of such parts of the town, as have been provided with drains, after flowing through the intercepting and gravitation sewers, discharges itself at ground level on a site used as the night soil trenching ground in the water spread of Maruppanikulam, an irrigation tank quite close to the Town, where it stagnates and emits a most offensive stench. The site is under water when the tank is full, and is totally unsuitable for the purpose. It has therefore been decided to acquire the entire ayacut of the Maruppanikulam, about 30 acres in extent, and lay it out as a sewage farm, to extend the gravitation sewer southwards to this site and to use the sullage for broad irrigation of the farm lands thus laid out. The estimated cost of the scheme is Rs 30,000. It is hoped that the farm will yield a fair return on the capital outlay.

Water-supply.—There are 36 tanks in the town of which 13 are conserved for drinking water. In the year in which the Pudukulam was completed, a street cistern was constructed and fitted with taps. A scheme for supplying piped water was formulated by Mr. Hormsji Nowroji in 1897. In 1908–9, a fresh scheme based more or less on the original Hormsji Nowroji scheme but modified in details was drawn up by

Mr. B. C. Fruhling, and put into execution under his supervision. The work was completed two years later at a total cost of Rs. 1,13,000.

The town is now supplied with drinking-water taps at the principal street corners and at intervals along the streets. The Pudukulam on the south is the supply reservoir. Its water is passed through settling tanks and filters, and pumped into a service reservoir on the high ground near Machuvadi at the northern end of the town, whence it descends to the streets by natural gravitation.

A Jewel filter was installed in 1915–6 at a cost of Rs. 26,064, and the filtered water has always been pronounced by the Director of the King Institute at Guindy who examines it periodically to be 'free from organic impurities.'

The Pudukulam reservoir supplies daily on an average only 60,000 gallons of filtered water for a population of nearly 29,000. The municipality has been able to provide only 37 * street taps, a number that cannot be considered sufficient.

The municipality has therefore had to look for other sources of supply to supplement the Pudukulam. A proposal to enlarge Adappankulam, a drinking-water tank on the North of the town, was considered and rejected, but it is now proposed to pipe water from this source to the suburbs of Tirugókarnam and Tiruvappur. Messrs. Aiyar and Mudaliar, two retired Engineers of Madras, after a preliminary investigation suggested that water might be supplied from the Vellar. Their scheme was however too costly ; but a revised but much cheaper scheme based on the recommendations of Mr. J. S. Westerdale, lately Chief Engineer to the Travancore Government, was sanctioned by the Darbar in 1932–33. An experimental well was sunk in the bed of the Vellar near Ammayàpatti, and the quality of the water obtained

* The total number of taps within the town is 51, of which 14 are in Government buildings.

was considered satisfactory. A full power test of the experimental well was carried out in the hot weather of 1933, and the results were encouraging. The investigation was finally completed in 1933–34, and sanction was accorded for the execution of the work at a total estimated cost of Rs. 55,000. The work has been completed, and water from the well sunk in the bed of the Vellar is now pumped to the Town water works. The water has been certified to be pure by the Director, King Institute, Guindy.

Unfortunately, however, people criticised the Ammayàpatti water on the ground that rice cooked in it turns yellow. Tests on a laboratory scale indicated that this slight discolouration is probably due to alkaline bicarbonates. Attempts were made to overcome this defect by chemical treatment, but the water so treated was said not to be palatable for drinking. It was then arranged to pump untreated Ammayàpatti water direct into the mains for so many hours daily. At other times Pudukulam water was supplied, and could be drawn by those who objected to cooking with the Ammayàpatti water. Even this failed to meet with public approval. The possibility of satisfactory chemical treatment of the Ammayàpatti water is therefore being studied afresh.

At present the street mains consist of 5″ and 4″ pipes, and the branches leading to the street fountains are 3″ and 2″. These pipes were laid 26 years ago and are now clogged considerably with the result that the flow in the branches has appreciably diminished and new taps could not be put up. The Darbar have now sanctionad Rs. 50,000 towards the cost of laying new and larger cast iron water supply mains. The new mains are 12″ and 10″ pipes, and the sub-mains 5″, 4″ and 3″. The pipes have been got down from the Bhadràvati Iron and Steel Works, Mysore State. When the work is completed, it will be possible to augment the supply in the street taps and to take out more branches especially to Tirugókarnam and Tiruvappur.

Bye-Laws.–Bye-laws under the Pudukkóttai Municipalities Regulation (No. IX of 1930) are in force on the following subjects:—

Bye-law 1.	Vital Statistics ...	Regulates the mode of use of burial and burning grounds and other places for the disposal of corpses.
2.	Conservancy ...	Provides for the cleaning of ash-pits and earth closets.
3.	Do. ...	Provides for the cleansing of latrines.
4.	Water supply and Drainage.	Provides for the construction and cleansing of cess-pools.
5.	Do. ...	Provides for the construction and regulation of house drains.
6.	Do. ...	Prescribes the mode of using public tanks, wells, conduits and other places or works for water supply.
7.	Do. ...	Provides for the regulation of public bathing, washing and the like.
8.	Do. ...	Provides for the protection of street water-supply from contamination.
9.	Do. ...	Provides for the maintenance and protection of water-supply from waste.
10.	Disease Prevention ...	Provides for preventing diseases in public halting places.
11.	Do. ...	Provides for the prevention of dangerous diseases of men or animals.
12.	Food control ...	Regulates the manufacture of ærated waters.
13.	Do. ...	Provides for the inspection of milch cattle and the regulation of the ventilation, lighting, cleaning, drainage and water-supply, of dairies and cattle sheds in the occupation of persons following the trade of dairy-men or milk-seller, etc.
14.	Do. ...	Regulates the preparation of flour or articles made of flour for human consumption.

Bye-law 15.	Do.	... Provides for the prevention of the sale of unwholesome meat, fish or provisions and securing the efficient inspection of and enforcing proper sanitation in shops in which they are kept or sold.
16.	Food control	... Provides for the regulation of hotels, lodging houses, choultries, rest-houses, restaurants, eating houses, cafes, refreshment rooms or coffee houses or any premises to which the public are admitted for the consumption of any food or drink.
17.	Do.	... Provides for the regulation of premises used for preparing sweetmeats or manufacturing jaggery or sugar-candy.
18.	Animal control	... Provides for the removal and disposal of carcasses of animals.
19.	Do.	... Provides for the regulation of the construction of stables, cattle-sheds or cow-houses and connecting them with municipal drains.
20.	Street control	... Provides for the prohibition and regulation of advertisements in public streets and parks.
21.	Land control	... Provides for the regulation of the excavation of stone, earth, sand or other materials.
22.	Trade control	... Provides for the regulation of weights and measures.
23.	Sequestered Mutton stalls.	Provides for the mode of keeping mutton stalls.
24.	Black-smithies	... Provides for the control of black-smithies.
25.	Rice Mills	... Provides for the regulation of and control over rice and other mills.
26.	Building control	... Provides for the regulation of construction of buildings.
27.	Do.	... Provides for the regulation of the construction of wells.

Bye-law 28.	Manufacture and storage of matches.	Provides for the regulation of the manufacture and storage of matches, and the production and storage of combustible or other dangerous substances.
29.	Disease Prevention—Prevention of Rabies.	Provides for the destruction of stray dogs and those suffering from contagious diseases or rabies.

In February 1934, the Darbar issued rules under the Public Resort Regulation (No. IX of 1912) regulating the mode of construction and use of places of public resort, such as theatres, and 'talkie' or cinema houses.

Public Health.—The municipality has an office for registering births and deaths. Steps are taken in co-operation with the Medical Department to prevent anticipated outbreaks of cholera and the spread of small-pox. Vaccination and inoculation with anti-cholera vaccine are performed on an extensive scale. The public health of the town is generally satisfactory.

Rabid and stray dogs are systematically destroyed, and recently an electrocution chamber has been installed for the purpose.

The Darbar have sanctioned as an experimental measure the opening of the maternity and child welfare centre in the Town under the control of the Municipality with a staff consisting of a lady Sub Assistant Surgeon to work as a health visitor and two mid-wives. The centre will be located in a central position in the Town. The Health Visitor will visit mothers and expectant mothers in their homes and render them proper advice regarding the maintenance of their health. She will also watch the babies until they reach the school-age. Ordinary ailments of women and children visited by the Health Visitor will be attended to by her, but cases requiring treatment in a clinic will be taken to the Ràni's Hospital for Women and Children or to the General Hospital. The scheme is expected to cost about Rs. 3,000 a year.

SECTION II.—UNION AND VILLAGE PANCHAYATS.

Introductory.—In 1892–3, Karambakkudi, Arimalam, Ràyavaram, and the taluk head quarter towns were laid out with broad and straight streets, and provision was made for lighting and daily scavenging. In the following year the officer in charge of the town hospital—called Apothecary in those days—was made Chief Sanitary Officer for the State, and ordered to report on the needs of rural sanitation after personal inspection. In 1895–6, Annavàsal and Ponnamaràvati were laid out, and provided with scavenging and lighting staffs. The supervision of rural sanitation, which had hitherto been a function of the Tahsildars, was transferred in 1902–3 to stationary officers such as the Magistrates and Sub-Assistant Surgeons. The Inspector of Vaccination was made an ex-officio Sanitary Inspector. A village Sanitation Regulation was passed in 1909–10.

Union Panchayats.—There are five Union Panchayats constituted under the Village Conservancy Regulation (No. IV of 1909), namely :—

1. Tirumayam.
2. Ponnamarávati.
3. Arimalam.
4. Karambakkudi, and
5. Annavásal.

Each Panchayat has seven members (of whom five are elected and two nominated), and is presided over by a non-official Chairman nominated by Government. Section 37 of the Village Panchayat Regulation requires that the Panchayats should meet at least once a month for the transaction of business.

The Public Works Department helps the Panchayats in framing estimates and check-measuring works.

A sum of Rs. 4,105 was spent on works in 1935–36 against Rs. 9,887 in the previous fasli.

The right of collecting fees in all weekly markets and daily vegetable markets situated within their jurisdiction, and in slaughter-houses is leased out by the Union-Panchayats annually. The annual State grant to all the Unions amounts at present to Rs. 5,400.

The receipts of the five Unions amounted in 1935-36 to Rs. 28,830 and their expenditure to Rs. 24,423. The accounts maintained by the Unions are annually audited by the staff of the Dewan Peishkar's office.

The Union-Panchayats work under the control of the Dewan Peishkar.

Village Panchayats.—Village Panchayats are constituted under the Village Panchayats Regulation (No. III of 1935). Four Panchayats were constituted in 1925-26, and the number rose to 38 in 1931-32. Only fourteen Panchayats are now functioning.

The Panchayats are concerned with the cleaning, lighting and repair of streets, protection and supply of drinking water, removal of noxious weeds, and maintenance of birth and death statistics. In the Nagarathar (Chettiar) Village Panchayats of Ràmachandrapuram (Kadiàpatti), Ràyavaram and Konàpet, the streets are lit with electricity, but the cost is met from private contributions. Nagarathars have made liberal donations to the Panchayats in the Chettinad for the improvement of roads as at Ràmachandrapuram and Ràyavaram, and street lighting as at Nachàndupatti and Kàramangalam. The Púvarasakudi Panchayat was maintaining for some years with the help of State grants, village roads,—for instance, the road connecting Tiruvadayàpatti with the main road from the capital to Arantàngi, and has raised a tamarind tope for purposes of demonstration and as a source of revenue. The Nachàndupatti Panchayat made special sanitary arrangements during the Kumbàbishekam festival in 1927-28. The Darbar have permitted some of the Panchayats to construct and control cartstands and slaughterhouses. The Panayapatti Panchayat manages the Elementary Schools within its jurisdiction. Four Panchayats have Reading Rooms and Libraries and earn state grants for their maintenance. The Puvarasakudi Panchayat has now been given the management of the cattle pound from which it earns commission. The Ràyavaram Panchayat attends to the

medical needs of the people with the help of a local medical practitioner who is paid a monthly allowance of Rs. 50 from Panchayat funds.

The number of members in the Panchayats varies from 7 to 11. The number of elected numbers is always not less than two-thirds of the total number, and the Presidents are nominated by the Darbar. Elections are held once in three years.

The total receipts of the Panchayats in 1935–36 amounted to Rs. 27,364. The opening balance was Rs. 9,710. Their total expenditure was Rs. 28,055. Contributions from the Government, both direct (Rs. 3,100) and indirect (Rs. 6,224 comprising slaughter-house fees, half the market revenues and penalties levied for encroachments on Natham Porombokes) amounted to Rs. 9,224 in the fasli.

In 1929-30, the Village Panchayats held a conference at Umayàlpuram. As the Darbar have observed (Administration Report, Fasli 1340), "the ordinary ryot is still unable to grasp clearly the idea of an annual local tax raised for the people, by the people and from the people for purely local needs, as distinguished from general taxation. Added to this there is a general paucity of literate persons able and willing to take up social work, and not infrequently influences are at work detrimental to the smooth working of these institutions." The Panchayats are however working satisfactorily on the whole "though generally speaking there is room for the display of much more keenness and public spirit, and the fall in expenditure and the large percentage of taxes left in arrears are subjects for regret."

Control.—The post of Panchayat Inspector was abolished in 1922–23, and his duties were transferred to the Co-operative Inspectors. The Panchayats were under the control of the Development Officer till May 1931. The Dewan Peishkar is now ex-officio Registrar of Village Panchayats assisted by the Deputy Registrar.

Village Conservancy.—The conservancy of villages outside the Union and the Village Panchayat limits is controlled by the Revenue Department. In a few of the larger villages, for example, Viràlimalai, the Government maintain a spécial staff for conservancy.

SECTION III.—RURAL IMPROVEMENT.

It may not be out of place in this chapter to mention the attempts made by the Darbar to effect rural improvement in the State. The village school, the village union or Panchayat and the rural co-operative society are the three great centres of rural improvement. The demonstrations and propaganda carried on by the Town State Farm and the Taluk Agricultural Inspectors, the touring Veterinary Assistant-Surgeons and the Health Inspector, and the Library and Agricultural Exhibitions conducted in the capital, and the taluk headquarters, and at festival centres, have been described at length in the chapters relating to Agriculture, Co-operation, Public Health and Education.

The Darbar have always held that the village school should as far as possible be the 'centre of community life,' and consequently, it has been their aim to train the school masters in rural sciences and in rural improvement work. The teachers under training in the State Training School were frequently taken out to the villages to gain experience of rural needs. They studied the conditions of villages which they visited and addressed the villagers on rural hygiene and sanitation. After the training School was closed, the Teachers' Associations have been carrying on this work. In fasli 1340, promising and energetic teachers were given a special course of training for work as "village guides". To co-ordinate the activities of the "nationbuilding" departments, the Darbar constituted a separate Development Department under a Development Officer who had charge of Co-operation, Panchayats, Agriculture and Forests. The finances of the State did not however permit of the continuance of these arrangements. At present the control of

all these departments is vested in the Dewan Peishkar, and is under the immediate charge of the Deputy Registrar of Co-operative Societies who is also the State Agricultural Marketing Officer. In Fasli 1343, the Darbar created the post of Rural Improvement Officer which is held by the Organising Secretary of the State Scout movement.

In Fasli 1345, (1935-36) the Darbar constituted a Rural Development Board consisting of seven officials and nine non-officials to discuss all questions of policy relating to the working of the Development Departments, to make suggestions in regard to agricultural, industrial and other matters of economic importance, and to advise the Government on these matters.

In December 1935 the Darbar invited Dr. Spencer Hatch, head of the Rural Improvement Centre at Màrtàndam (Travancore) to visit the State and advise them in regard to Rural Improvement generally. He interviewed a number of officials and non-officials, inspected the Poor Home, the Town Agricultural Farm and some villages, carried on an open discussion at a public meeting and favoured the Darbar with a memorandum setting forth his views. The Darbar then deputed the Rural Improvement Officer, one of the Veterinary Surgeons, the Manager of the Poor Home and the Maistry of the Town Agricultural Farm to undergo training for about 4 months under Dr. Hatch at Màrtàndam in poultry-farming, cattle-breeding, bee-keeping, jaggery manufacture, cashew-nut roasting and shelling and other manual crafts. After returning from Màrtàndam these officers, except the Maistry whose work is confined to the Town Farm, have each taken up intensive improvement work in a selected village. Work is thus going on in six villages. In one of the model villages, Vallathiràkottai, quite a good beginning has been made. The Adi-Dravidas there have taken to weaving towels, and the people in general grow more vegetables, and have removed their manure heaps outside the village and stored them in properly shaded pits, and above all they have kept the village streets clean.

The Darbar have started apiaries at the State Farm, in the Ananda Bagh Park and at the Poor Home. Thanks to the example thus set, bee-keeping is now spreading into the villages.

The poultry-farm at the Poor Home is being improved and restocked. Other farms have been started at the State Farm, and at Kíranur and Viràlimalai. The poultry-farm at Kíranur is now looked after by a teacher of the State School who has completed a course of training at the Rural Improvement Centre of the Seventh Day Adventists' Society, Bangalore.

The Darbar have directed the officers engaged in village improvement work to endeavour to induce the people of the selected villages to undertake to avoid extravagant expenditure on marriages, jewellery, etc.; not to waste money on drink, but to try to save money and invest it in a Co-operative Bank; to combine their labour for works for the common good; to keep their homes and the surroundings clean, and not to commit nuisance near houses or drinking water sources; to devote their spare time to useful work such as spinning, gardening, rearing poultry, etc.; to dig as many wells as possible; to take up dry land for cultivation; and above all to rely more upon themselves than on the Government for the amelioration of their condition.

In the opinion of the Darbar, Rural Improvement, if it is to be of real and lasting value, must consist, not in the execution of relatively expensive works paid for from public funds, but in inducing the villagers to do things for themselves in their abundant leisure time and to co-operate for that purpose. The Darbar have spent large sums, in proportion to their finances, in recent years, on rural water supply, but have never pointed to the works thus executed as examples of Rural Improvement.

Agricultural Marketing.—This section deals with the results of the survey so far made by the State Marketing Officer on the lines suggested by the Agricultural Marketing Adviser to the Government of India. When the survey of all the agricultural products has been completed, it will be possible to gauge

what position the State occupies in the production and consumption of the different products for daily use.

Paddy:—The extent under paddy cultivation in any year varies directly with the rainfall. In 1920, with a rainfall of 60·44 inches, paddy was cultivated on 1,61,000 acres; and in 1922, with 45 inches on 1,56,000 acres. In years in which the rainfall was between 35 and 40 inches, the extent under paddy ranged between 1,10,000 and 1,32,000 acres. In fasli 1344, when the rainfall was below 25 inches, the area under paddy was only 56,000 acres.

The average area under paddy for the last fifteen years is roughly 1,10,000 acres, and the average yield per acre, 13 7/11 kalams or 1,023 lbs. The total production of paddy is estimated at 15,02,322 kalams or 50,301 tons. Out of this quantity 5,525 tons (at the rate of 45 Madras measure per acre) are used as seed, and the balance of 44,766 tons of paddy (29,850 tons of rice) consumed.

Out of a total population of 4,00,694 (census of 1931), 3,12,624 are adults;—1,16,000 live on millets, and 1,96,624 require rice, and 39,250 tons of rice are required for their use. The State has therefore to import annually on an average 9,400 tons which are obtained mainly from the adjoining British districts of Tanjore, Trichinopoly and Madura.

The value of 39,250 tons of rice, the quantity required for the State as a whole, at the rate of Rs. 4—14—0 per Imperial maund is Rs. 52,08,800; and that of local production, viz., 29,850 tons of rice excluding the quantity reserved for seed, Rs. 39,61,260. The value of the total imports of paddy (either as rice in the husk or as rice) works up to Rs. 12,47,640. The consumption per head is 0·098 tons of rice valued at Rs. 13.

Ground-nut:—The area under cultivation is 18,050 acres. The extent is greatest in the Álangudi Taluk (11,000 acres), Kolattur comes next (7,000 acres), and the extent in Tirumayam is negligible (50 acres). Ground-nut is grown chiefly in the north, north-east, and eastern parts of the State.

Taking the average yield per acre as 300 Madras measures of kernel which is equivalent to 800 lbs. or 5/14 of a ton per acre, the total yield of kernel in the State is approximately 6,500 tons. It is believed that a tenth of this quantity is consumed in the State while another ten per cent is reserved for seed. The remaining 80 per cent is sent to the Tanjore district and exported from Negapatam. The value of the quantity exported is Rs. 8,19,000 at the rate of Rs. 9 per bag of 60 Madras measures of kernel weighing 160 lbs.

Tobacco :—The area under tobacco in the State is no more than about 25 acres The crop is valued at Rs. 4,500. Chewing tobacco is almost a necessity for the agricultural and labouring classes. The value of the quantity of tobacco consumed is about 2 lakhs of rupees for the ordinary variety, and Rs. 20,000 for the superior variety imported from Sivapuri, Védàranyam and other places. The value of tobacco-products consumed (snuff, cigars, cigarettes, and 'bidis') is approximately Rs. 1,15,000. Including the profits of the retail traders, the total annual value of the tobacco and products thereof sold in the State amounts to about Rs. 4,00,000; or about one rupee per head of the population.

Hides and Skins.—The only tannery for hides in the State works on a modest scale. Raw hides and skins are sold to the value of about Rs. 1,14,000 a year in the town weekly market to merchants from the surrounding districts. The possibility of encouraging the tanning industry in the State is engaging the attention of the Darbar. It seems to be almost the only industry capable of development since there is no lack either of hides and skins or of avarai (*Cassia reticulata*) a valuable tanning material. But though a small fortune perhaps awaits any one who has the enterprise to launch out in this direction, the usual absence of a spirit of self-help and tendency to look for assistance from the Darbar are serious obstacles to any progress.

Fruit :—The only fruits grown in the State are mangoes (both the local variety and the 'grape' variety) and plantains;

but the quantity produced is quite insufficient to meet the local demand, and large quantities are imported from the adjoining British districts, chiefly from Trichinopoly. The quantity of these fruits imported annually is estimated at 19,970 maunds valued at Rs. 64,330.

Imported oranges are consumed by the middle and upper classes, They are not produced locally. The total annual demand in the State may be roughly estimated at about six lakhs of fruits valued at about Rs. 15,000 at an average rate of Rs. 2—8—0 per 100.

CHAPTER XIII.

LAND REVENUE ADMINISTRATION.

THE AMANI SYSTEM.

Early Features.—State inscriptions show with what consideration the *Kudimakkal* or cultivators were treated. An inscription in the Haratírtéswara temple at Tiruvarangulam dated the 40th year of Tribhuvana Chakravarti Tribhuvana Víradéva (A. D. 1218) records the determination of Kúrappàttàḻvudévimangalam to afford them every protection and to confiscate the lands of any who offended them. Another inscription (A. D. 1202) in the Uttamanàthasvàmi temple at Kíranúr records a covenant entered into by the inhabitants not to cause damage to wells and tanks. A third inscription at Nírpalani fixes a *má* of land as the penalty for such transgressions.

From the State inscriptions we learn that from about the 10th century A. D. the cultivating village was a commonwealth, the temporal concerns of which formed the care of an assembly variously called *Sabai, Náḍár,* and *Úrár*. This body collected, and also assessed the tax on land, and remitted the dues to the temple and the State. These village assemblies were responsible for the payment of land revenue to the State and had power to escheat lands from which taxes fell in arrears. They had powers of effecting partial or full remission of all taxes in certain cases, *e.g.* temples and endowments for religious and charitable institutions; but in all cases, as the total revenue from a village due to the State was to be paid at all cost, they had to make good the deficit on account of remissions by distributing it among other holdings in the village. Such lands which were tax-exempt under the township were called *Vir-kiḻiraiyili*. The assemblies were elected and had fixed terms of office, and the qualifications for candidature were very strict. That such powers were exercised by these assemblies may be inferred from inscriptions such as those at Nàrttàmalai dated the 37th year of Kó Parakésarivarman Tribhuvana Víradéva, (A. D. 1214) which laid

down in connection with a sale of land that the taxes relating thereto were payable to the city. It is also likely that lands were during all these centuries held and cultivated in common, and the produce divided after meeting State and other common demands.

For administrative purposes the country was divided into *valanádus* (provinces) *nádus* (districts), *kúrrams* (taluks), *vattams* (circles), and *úrs* (villages). An inscription in the Tirumalai Kadambar temple at Nàrttàmalai refers to a *nila alappu* or measurement of land, and there is evidence to show that in such surveys even small fractions of land such as $\frac{1}{320}$ of a *má* were recognised and measured. That the tax was assessed on certain broad and equitable principles would appear from the inscription in the Vàgisvara temple at Malaiyadipatti, (A. D. 1087 ?) which alludes to the levying of taxes according to the crop and the facilities for irrigation in the village of Kalkka [di] in Kilsengili Nàdu.

In the later centuries of general insecurity, the village communities found it expedient to seek the protection of local chieftains called *araiyars* to whom they sold the *pádikával* or watchmanship of their villages, for a share in the produce of the land. When the *araiyars* gradually assumed sovereign powers the grain fees that they originally received for their police duties became an *arasu svatantaram* or royal tax. The following inscription dated the 47th year of Kómàrapadma Tribhuvana Chakravarti Sri Víra Pàndya Déva (1380 A. D.) is quoted as showing the share that villages were prepared to give to the *araiyars* from whom they sought protection.

"Since our village has become ruined and we have ourselves been reduced to very straitened circumstances on account of the inroads of the Mussalmans, and since we find no other course open to us and have no seed-grain, we have agreed to sell the village watchmanship for 300 Kulasippanam of Vàlàl Vali Tirantàn * and, receiving this amount, we, the inhabitants of

* Válál Vali Tirantán = one who carved out his own path by the strength of his sword–an old appellation of the Pándyan Kings.

the village, have sold the village watchmanship to Vijayàlaya Tévan of Súraikkuḍi on oath. We will give him:—

(1) For lands growing paddy, a head-load of sheaves per *taḍi* of land.

(2) For lands growing *thinai–Setaria italica,* (on wet land) for one *taḍi* of land, two *marakkáls,** measured by the *marakkál* of Ádanúr;

(3) For lands growing sesamum (gingelly), for one *taḍi* four náḻis of Ádanúr;

(4) For lands growing sugar-càne, for one *taḍi*, 20 palams of sugar;

(5) For lands growing turmeric, ginger, karanai (*Typhonium trilobatum*) and betel also, he is to receive his share—(the usual share it may be supposed);

(6) Of cocoanuts, jack trees, plantains, and mangoes growing in the village, he is to receive his due;

(7) For the grains *varagu* (*Paspalum scrobiculatum*) and *sámai* (*Panicum miliaceum*) growing on dry lands, for one punjai land one head-load of sheaves:

(8) For sesamum growing on dry land, for one punjai land four náḻis (or measures);

(9) For horse-gram growing on dry land, for one punjai land one *marakkál* of grain by the Ádanúr measure;

(10) For cotton growing on dry land, for one punjai land ten pods of cotton;

(11) We, having fixed the price, and having received the amount in full settlement, sold these *páḍikával* rights on oath. This document is to be treated as the *ólai* - final deed of sale, errors and omissions excepted.

Clause 11 probably relates to some private purchase by the chieftain. It was presumably in relation to a home farm which was the chief source of income to every chieftain in former times. Meikondon of Nandavanampatti, for instance, who is often referred to in the letters of the Madura Mission as a wise and powerful chieftain, is described as owning a 'personal estate' 'distinct from any sort of public revenue if any such existed at all'. The practice of holding private lands by the ruling princes continued down to the middle of the last century as is evidenced by the Indigo factory owned by Ràjà Vijaya Raghunàtha, and by the existence of a privy-purse account called the Ràjmahàl, the funds of which were derived from the revenues of certain villages regarded as the Raja's private property.

* 1 *marakkál* = 8 *paḍis* (measure)

The inscriptions also show that the taxation on land was so heavy and the methods employed in the collection so cruel that the villagers sometimes migrated *enmasse* as happened at Sevalúr, Madiàni, and Gúḍalúr.

It would also appear that extensive alienations of tax-free land were frequent. Free occupancy rights were often assured to agriculturists to induce them to settle in the *káḍárambam* or dry tracts. In the centuries of incessant warfare, a body of feudal men-at-arms was called into existence by grants of land free of tax. The desire for peace and harmony among the members of the royal household led to the creation of Jàgírs (assignments of land or of revenue either in consideration of services to be rendered or absolutely). The religious impulses of the rulers and the masses led to numerous benefactions to temples and alms-houses; and respect for learning resulted in gifts to Brahmin scholars who then represented what was highest in the indigenous culture.

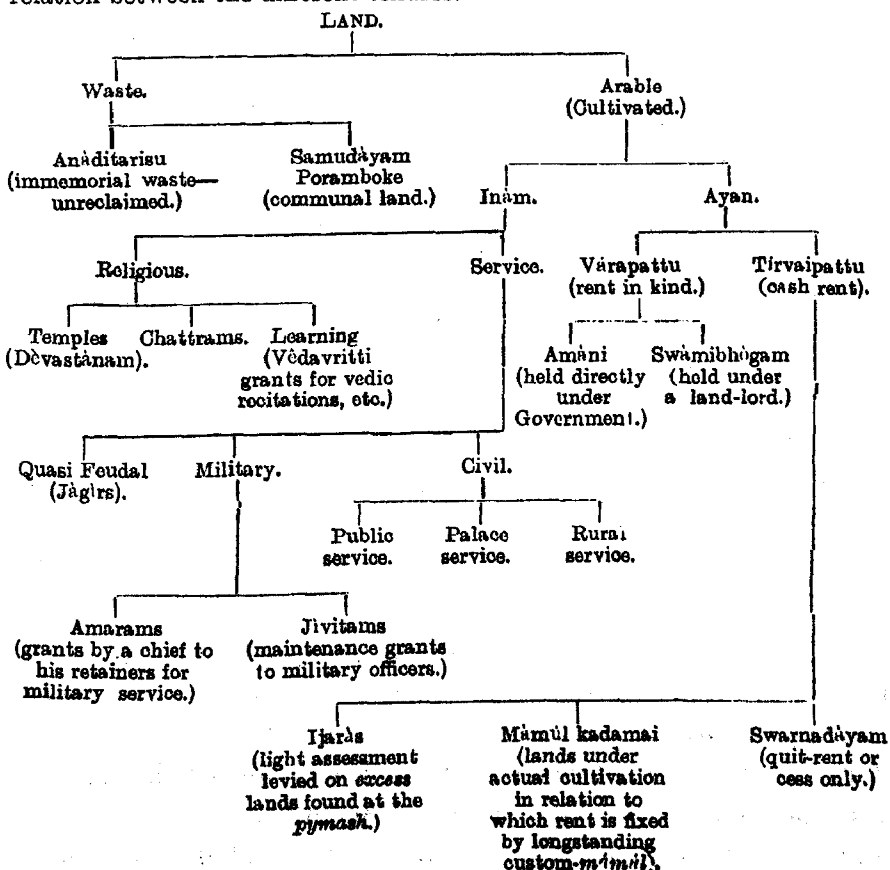
As the country settled down to peace the attention of the rulers was naturally drawn to the expansion and settlement of land revenue. One of the earliest steps taken in this direction appears to have been a *pymásh* or rough survey which led to the detection of *Vengams* or areas held in excess of original grants by the militia and other inam holders, and to a permanent leasing out of these excesses under a system of light assessment called *mamul ijára*. A second step seems to have been the resumption and transference to *amáni* (or the ordinary produce-sharing tenure) of service inams on the death of the original grantees when the services became unnecessary. Attention also appears to have been directed to large areas of land held under a light assessment called *mámúl kadamai* fixed by village officials who in former times had full power to dispose of land. Not only was the assessment on such lands generally low, but complete exemption from taxation had been granted in respect of *podukkal* or occasionally cultivated wastes. The title-deed known locally as *tulli chìttu*, while it stated the extent of land held, defined

neither the boundaries nor the tenure; and in consequence frauds and encroachments were rampant. A reform in this direction made early in the 19th century was the transference of the authority to grant *tulli chìttu* from the lower to the higher Revenue officers and the introduction of sale of Government land by auction (pétàpéṭṭi).

Before describing the system of Revenue Administration in the 19th century it may be useful to review the different classes of land tenures that had sprung up introducing complex conditions and difficult problems for administrations to face and solve.

The Tenures.—* Cultivable land was either waste or occupied. The waste, while excluding hilly and jungle tracts,

* The following table may perhaps help the reader to understand the relation between the different tenures.



included *anádi tarisu* (immemorial wastes) and *samudáyam poramboke* (communal land). The occupied area was *inám* (alienated), or *ayan* (State owned). Inam lands were capable of a two-fold classification according as they were alienated in the name of religion and charity or in consideration of service to be rendered. Under the first came lands set apart for Dévastànams (temples) and chattrams (alms-houses) as well as the Brahmadàyams, Védavritti and other grants made to the Brahmins.

Jágìrs.—The jàgírs were the most important of the inams. They must have originated, as the name indicates under Muhammadan influences at a time when territorial grants were made by the Rulers to near relatives or dangerous rivals within the State to propitiate or mollify them by gifts of land over which they could exercise a sort of sovereign rights in some limited and subordinate way. For example the creation of the Western Palace Jagir which lay along the frontier and included villages recently annexed such as Tirukkalambúr, Idaiyàṟṟúr and Vàrpaṭṭu appears to have been intended to secure the defence of the frontier. But Chinnaṛanmanai and Manóvarti, the two other jàgírs, were not liable to any military obligations. The latter was a source of pin-money for the Rànis.

These Jàgírs were mere revenue assignments, inalienable by sale, gift or mortgage; resumable for misconduct or other reasons; liable, at ordinary times, to cesses such as *pillu vari* (grass tax), and to 'extraordinary assessment' in emergencies. They were taxed exactly like 'ayan' lands; the difference being that the jágírdar was entitled to collect and enjoy the revenue.

Of a more purely military and feudal origin were the *amarams* granted to the amarakàrs (retainers), sérvaikàrs (captains), *vaguppu* sérvaikàrs (captains of squadrons) and Sardars (colonels) of the State militia. Each officer held in feudal fief a certain extent of land calculated according to his importance and the number of followers that he brought into the field.

Each *amarakár* was given land sufficient to maintain himself and his family, an *áḷ jìvitam* as it was called, the extent of which was usually 1,000 kuḷis of irrigated wet land (3⅓ acres) or 1,500 kuḷis of rainfed wet land (5 acres) or 3,000 kuḷis of dry land (10 acres.)

Inams granted for *úliams* or services of a civil nature were called *umbalams* and *rokkakuthagais*. Sometimes the service was attached to the palace, and consisted in performing sundry domestic duties such as lighting lamps or washing clothes, or mere attendance on ceremonial occasions connected with births, deaths, or marriages in the palace. Village services such as those rendered, under the amàni system, by the miràsdar, the vettiyàn (the village menial), and the artisan were also remunerated by gifts of land, which were consequently known as *mirási umbalam, vettiyán umbalam, etc.* Over and above these there were a number of petty *umbalams* held for the performance of sundry petty services for the temples, the Ràjà and the officers. Examples are—furnishing leather for temple drums, rags and bearers for the temple torches, men to carry *váhanams* (the vehicles of the gods) or drag the temple cars, beaters for a royal hunt, supplies for touring officers, *etc., etc.* Not all these services however had separate *umbalams* attached to them, and some of them, such as dragging the huge temple cars, were obligatory on every pattadar in the State although he held no *umbalam* for it in particular.

The inàm lands brought in hardly any income to the State except in the shape of *swarnadáyams* composed of quit-rents and cesses. The bulk of the Revenue was derived from the *ayan* areas which fell into two great divisions—the *várapattu* and the *tìrvaipattu.*

Amáni was the name given to the *várapattu* settlement under which no definite *rent* was fixed, but a share of the actual produce was taken at prescribed *rates.* This was, till recent times, the most outstanding feature of Land Revenue in the State.

Till about the beginning of the 19th century *amáni* lands included the most extensive and richest lands and contributed most of the State Revenue.

Originally, as in neighbouring Zamíndàris, the State had to realise its revenue by sharing the actual produce with the ryot on the threshing floor. Yet the 'amàni' was not a ryotwari tenure * altogether. The State was in theory and practice the owner of the land, and the cultivator had no right to transfer, or transmit his land. The *pannai* (or home-farm) lands cultivated directly by the State were classed as *várapattu* as if the *pannaiyáls* (serfs attached to home-farms) and *amáni* ryots occupied a similar position. But the lot of the *amáni* ryots was not so precarious as that of the *pannaiyáls* who were entitled to hardly anything except the bare expenses of cultivation.

Amáni rates vaied from time to time. Manu's rule that the King's share should be one-sixth of the produce in times of peace, and a little more in war time was probably never put into practice. Local tradition fixed the *mélváram* at one-third of the produce for wet, and at about a half for dry lands. But very often the lands were heavily and ruinously assessed. In 1808, the prevailing settlement was, according to Major Blackburne, 25 to 40 per cent *kudiváram* (cultivator's share) on wet and 50 per cent on dry lands; which means that the Government share had risen, at least on wet lands, from 33⅓ per cent to about 60 per cent.

Whatever may have been the rate, the division between the State and the ryot was carried out after deducting the following *swatantarams* or emoluments in kind amounting to 10 per cent of the yield.

* Settlement of land revenue directly with the individuals (ryots). (Ryots enjoy proprietary rights).

		Kalams.	Marakkáls.
*1.	Threshing charges ...	7	2
2.	Temple Brahmin ...	0	8
3.	Karnam (village accountant).	1	3
4.	Pound-keeper	0	4
5.	Kávalkár (watchman) ...	1	0
6.	Smith and carpenter ...	0	8
7.	Dhobie (washerman) and barber ...	0	2
8.	Vettiyán (menial). ...	0	9
9.	Potter	0	2
10.	Tandakkáran (menial helping in tax collection) ...	0	4
		12	6

An occasional and later feature of the *amáni* tenure was *swámibhógam* or the letting of land to anyone who offered a *swámibhógam* or premium in addition to the prescribed rates of *mélvåram*. Under this system, cultivators attached to the soil for generations were evicted when higher bidders appeared. The origin of this innovation probably lay in a desire to increase the productiveness of the soil, and in consequence the State Revenue, by transferring the land to more capable and energetic hands.

Under the *amáni* system the cultivator was sometimes assisted with seed-grain by the Sirkar, but more often he incurred and risked all the expenses of cultivation. He ploughed, sowed, transplanted and irrigated at his own cost; but when the crops matured, an estimate was made of the harvest by the local miràsdàr, and checked by the higher revenue authorities after personal inspection. In the meanwhile, the crops were watched by kangànis told off from the ranks of the militia; and under their watchful eye, and in the presence of the Taluk officers, the crop was threshed and divided. The State's share was sometimes left with the ryot at his own house, either

* Settlement Scheme Report of 1909

in trust or under the lock and key of the village officers, or—and this was the more usual practice—was removed to *ambárams* (State granaries) where it was stored under the charge of the miràsdàr and the vettiyàn till such time as the market price was favourable to the State, and contractors were found to tender for its purchase. The responsibility of the miràsdàr and the vettiyàn for safeguarding the State paddy did not cease till the contractors in their turn had found purchasers and removed the grain from the granaries; and not until the contractors had paid their dues into the Treasury was the price realised entered as Land Revenue in the public accounts.

The advantages of the system, at least in theory, were its equality of incidence and its productiveness to the State. It was equitable to the ryot since the Sirkar shared with him the vicissitudes of season and market. It rendered both remission and suspension of revenue unnecessary, since it provided an automatic relief in bad seasons. It was also advantageous to the State since revenue was bound to increase with every improvement in the land.

Tìrvaipattu.—The other kind of Land Revenue consisted of money rents known as *tìrvai kadamai* and *ijára.* It originated as already observed, in the *ijáras* or leases of *vengams* (excess lands) enjoyed by the inamdars. Where the lease was more or less permanent, it was called *mámúl ijára*; and where it was terminable, *gedu ijára.* Sometimes even persons who did not render any military service appropriated State lands with the help of the village officials from whom they got cadjan (palmyra) leaf documents called *Tulli chìttu* issued without the authority of the higher Revenue officials. These lands were known as *mámúl kadamai lands.* A later development of the tenure was known as *karárnámá* (application) or *nilacha* (permanent) *kadamai*, and this was generally adopted in the case of jungle and waste lands difficult of reclamation and granted on a *karárnámá* from the ryot, after ascertaining by issuing an *istyar* (notice) whether there was any competition for the land.

The *cowle* conferred the right of possession on the terms and conditions laid down in the *karárnámá* but the rates of rent were liable to enhancement at every *taramfysal* or settlement.

Some times the revenue of whole villages and groups of villages was leased out for from 5 to 10 years, excluding *inám* and waste lands but including *amáni* and other tracts hitherto under the direct management of the State. The renters were authorised to collect *mélvâram* and *kadamai*, (that is, State dues in kind and cash), but they were liable to pay extra for cultivation of Porambokes. The lease rent was not calculated with any regard to the prosperity of the ryot, but based on the highest revenue on record, so that the system eventually led to rack-renting of the most oppressive type.

The *tìrvai* rates, having thus been fixed under various systems and on no definite principle, were bewilderingly numerous. There were, as Mr. Pennington wrote in 1875, "218 nanjai rates varying from Rs. 1—14—0 to Rs. 132, a veli, 16 nanjai garden rates ranging from Rs. 31—4—0 to Rs. 475, 202 punjai rates from fifteen annas to Rs. 62—8—0, and 17 punjai garden rates from Rs. 10—2—2 to Rs. 1,125."

From an examination of old *chittas* it appears that the largest proportion of lands held under *mámúl ijára* was in the Tirumayam Taluk, and under *mámúl kadamai*, in the Alangudi Taluk, that the highest *mámúl kadamai* rates per acre were Rs. 12—8—0 for wet, Rs. 6—2—0 for *achukkattu*, and Rs. 2—8—0 for dry; and that the assessment was sometimes in respect of a *kuli*, and sometimes of a *má*, or 5 *más* (¼ veli).

Swarnaddyam.—A third species of land revenue was the *swarnaddyam* which included nearly 40 different quit-rents and cesses levied on villages and lands which were not *ayan*, that is, not liable to full assessment, and of taxes on trees, fisheries, and stone-quarries. Foremost among them were the quit-rents on various inams excluding the Devastànams, chattrams, and jàgírs.

The Chinnaranmanai jàgír was subject to a *pillu vari* (grass tax) in lieu of an original obligation to supply the palace stables with fodder. The quit-rent on *srótriem* lands was not liable to revision. *Poruppuvari* was a cess charged on all kinds of religious inàms ranging from small *mányams* to big *Dévaddáyams.* There were numerous cesses, such as *kulavettu* or *marámát vari* levied for repairs to irrigation tanks, *kanakku vari* (karnam fees), *pádikával* (militia fee) and *nìráṇikkam* (water cess). The cesses in respect of trees, quarries, etc., also came under this class. Fruit, timber, and toddy-yielding trees (such as the cocoanut and palmyra), the mango, the tamarind, and the jack were taxed. Cesses were also levied for quarrying or collecting *savuttumaṇ* (fuller's earth), salt-petre, red-ochre, and lime-stone. There were special taxes on cattle such as *sangaren vari* for pack-bulls and *kiḍá vari* for grazing cattle in the jungles. There were further a number of petty and unclassifiable charges, such as *kudi umbala bhet* levied in lieu of customary presents to the ruler; and *ehdyá bhágam* for trees that cast shade on Sirkar lands to the detriment of cultivation thereon.

Reforms in the early 19th Century.—So far we have described the land tenures and the sources of land revenue at the close of the 18th century. This period marked the close of the era of war, and the establishment of British sovereignty in Southern India. In Pudukkóttai, it coincided with the rule of one of the most benevolent of Princes—Ràjà Vijaya Raghunàtha, known not only for numerous charitable endowments but also for the first systematic attempt at an equitable assessment of land revenue. At that time, the country and its ruler came under the direct influence of an Englishman of rare sympathy and talents—Major Blackburne. Moreover, in the adjoining British Districts a Revenue Settlement was being introduced which must have facilitated the performance of a similar task in Pudukkóttai.

The Revenue system no doubt required over-hauling. Owing to the defects of the system the Revenue was not half of what it might have been. The economic condition of the ryot under the *amáni* was bad, since the division of the produce under the system was uncertain and varied from year to year.

Out of a genuine desire to ameliorate the condition of his subjects Ràjà Vijaya Raghunàtha introduced certain reforms. The *amáni* tenure was still preserved, but the rates were revised in favour of the ryot. The Revenue officials also came in for a share of correction, for they had oppressed the poor when their palms were not greased, and even embezzled public money; but the remedy that the Ràjà administered was more heroic than effective. He frequently changed the Revenue officials, and any one who exposed the frauds of the holder of any office and agreed to collect more revenue was appointed in his stead. This arrangement, while it had the merit of weeding out dishonest officials, offered no encouragement to any one to continue long in service and practically delivered the country into the hands of competing place-hunters and rack-renters.

Even had the personnel been perfect the system itself was defective. To quote the words of Major Blackburne (1808), "with the exception of informers no checks existed in the Revenue Department. No double set of accounts, as in Tanjore and the Carnatic; no kurnams; no regular cutcherrie in the District with the officers appointed by the Government; no regular Dufter in the capital; no office anywhere in which the accounts of the country were recorded. Tondaimàn himself or a person temporarily and verbally authorised by him usually received the money which was transmitted from the Districts by the Revenue officers; sometimes this person gave a receipt for it, sometimes the Sarkil, and not unfrequently no receipt was given. The Revenue Divisions of the country seldom continued the same two years together. As caprice or interest dictated, portions of land separated from one Division were added to another.

From all these circumstances the public accounts which existed were............contradictory and involved in.... ...inextricable perplexity." There also obtained a deplorable practice of handing over whole villages to State creditors, investing them with the authority of the Government to collect revenue and adjust it against their dues.

Blackburne's reforms.—To remedy these evils, a few reforms were carried out during the minority (1807–1817) of Ràjà Vijaya Raghunàtha Raya under the advice of Major Blackburne. Fixed rents in kind were substituted for the old *amáni.* The State was divided into five districts. Revenue officers were instructed to conduct business in *cutcherries* (offices), karnams were required to submit weekly reports and accounts to an office at the capital under the direct charge of the Sarkíl, and revenue payments were declared to be valid only when acknowledged by the Sarkíl himself. Other measures were the introduction of the Marathi system of account-keeping, the abolition of a small and vexatious tax called *catcha wasool* which demoralised the administration, and the remission of all uncollected arrears up to 1806–7.

About 1813, a survey of the State was in progress under the advice of the Madras Government. In 1854 some petty taxes on bangle-earth, lime, etc., were abolished.

Taramfysal.—A ryotwari settlement known as *Taramfysal* was conducted in Fasli 1278 in 48 villages of the Viràlimalai firka comprising 2,018 acres of nanjai, and 17,161 acres of punjai including 368 acres of garden land. It was conducted roughly on the lines of modern settlements, with a preliminary *pymásh* or rough survey, and a classification of soil and irrigation. Two important features of the settlement were the grant of annual remission when cultivation failed totally over extensive areas owing to excessive or deficient rainfall, and the levying of a second-crop charge at half the rates for first-crop on wet lands.

The Taramfysal rates were as follows :—

Wet. *

Soil.	Tank irrigating over 4 months. Rate per véli † in Rupees.			Tank irrigating under 4 months. Rate per véli † in Rupees.		
	I sort.	II sort.	III sort.	I sort.	II sort.	III sort.
Padugai (alluvial) ...	42	37	32	37	32	28
Karisal (regar) ...	37	32	28	32	28	24
Sevval (red) ...	32	28	24	28	24	20
Manal (sandy) ...	28	24	20	24	20	16
Saralai (gravelly) ...	24	20	16	20	16	12
Kalar (saline) ...	20	16	12	16	12	8

* Settlement Scheme Report of 1909.

† 1 Veli = 6·74 acres.

Dry.

Soil.	Ordinary dry lands. Rate per véli.			Dry lands on which garden crops were raised. Rate per véli.		
	I sort.	II sort.	III sort.	I sort.	II sort.	III sort.
Karisal (regar) ...	14	13	12	31 (for all soils)	4 (for all soils)	...
Padugai (alluvial) ...	12	11	10			
Sevval (red) ...	11	10	8			
Manal (sandy) ...	10	8	7			
Saralai (gravelly) ...	8	7	6			
Kalar (saline) ...	...	...	...			

The Taramfysal appears to have been popular in spite of its rather high 'dry' rates, probably owing to the provision for remission.

Erpattu Tirvai.—This was a settlement of minor importance introduced about 1860 in the time of Sarkíl Annàswami Aiyar and Mr. Morris, Political Agent, under which minimum rates of assessment were fixed in order to raise the extremely low rates that prevailed over large areas. The minima so fixed were Rs. 25 per véli for wet, Rs. 22 for *achukkattu*, Rs. 10 for 'cumbu' dry and Rs. 6 for 'varagu' dry.

The evils of the amani.—In the second half of the 19th century the evils of *amáni* had become pronounced. The system had become permeated by defects inherent and imposed. It threw an excessive amount of work on the Revenue staff which, while exposed to temptations and opportunities for illicit dealings, could not discharge the duties expected of it. Secondly it was advantageous neither to the State nor to the ryot. The acreage under *amáni* fell steadily from year to year in spite of every attempt of the Government to check this tendency. In 1875, for instance, the *amáni* area was but 17½ *per cent* of the total area under cultivation, and had fallen to 22,743 acres from 31,496 acres in Fasli 1257.

As for the ryot, his lot was past remedy. Even the half-and-half settlement introduced by Ràjà Vijaya Raghunàtha was so excessive that no ryot took to *amáni* cultivation with zeal; and any enthusiasm that still lingered was finally crushed by the *pétápéṭṭi* (auction) system under which his lot became more precarious from the perils of unexpected eviction. If he cultivated and improved the land, the State stepped in to share the profits equally with him, while he himself ran every risk of losing his own share through reductions and fines imposed by official rapacity and greed. In fact, every possible opportunity was taken to harass and defraud the poor cultivator. Sometimes the crop was overestimated; sometimes the harvest was so long delayed that the crop became over-ripe, and much of it was lost during its removal to the threshing floor. For him it was a case of 'Heads, you win, tails, I lose.' He was held responsible for every shortage—shortage below the estimated yield, shortage in the granary, and shortage during sale; and, what was worse, he was forced to take back the Government share if it did not sell at commutation rates fixed by the Government, and make good all shortages discovered up to that time.

It was indeed a wonder, as Mr. Pennington exclaimed, that serfs could be found so abject as to cultivate at all.

Here is Sir Sashia Sàstri's account of the evils, or as he put it, of the 'beauties' of the *amáni* system:—

"As soon as the ears of the grain make their appearance an army of watchers called Kangànies (literally eye-watchers) is let loose. As they get no pay for the duty, and are for the most part the old militia of the country, on whom this kind of work is imposed since fighting times had departed, and get a grain fee on the crop they watch, their watch is at best often lax.

"When the crop arrives towards maturity it is the turn of the Sirkar village officers and the village head-men (called Miràsdàrs here) to go round the fields and note down the estimates of the crop. That there is considerable wooing and feeing at this stage goes without saying. As in other matters so in this, the race is to the rich and woe to the poor.

"As soon as the village officers have done and reported the first estimate, down came special estimators from the Taluk Cutcheries to check the first estimate. Their demands have equally to be satisfied. Then comes the business of obtaining permission to cut and stock the crops. Here again another stage, when much feeing and grudge-paying take place. If permission is delayed just two days, an adverse shower of rain irreparably damages the crop on the field, or over exposure to the sun renders the grain unmarketable.

"Then comes the threshing and division of grain on the threshing floor. What takes place then may be imagined. If the outturn is less than the estimate, the ryot is made responsible for the difference without any further ado. If it is more, woe to the estimators. The result in the latter case is often that the difference is made away with and shared half and half between the ryot and the officers concerned. During all this time the unpaid army of watchers continues on duty.

"Now the Sirkar grain is removed to granaries. Is all danger over now? By no means. A fresh series of frauds commences. The granaries have neither impregnable walls nor

Chubb's patents. The half-famished vettiyàn, the hereditary watchman of the village, mounts guard, and he and the village headman are personally held responsible for any deficiency which may occur on the remeasurement of the grain out of the granary. It often happens that the poor vettiyàn stung by hunger is driven to certain deeds much against his conscience. Scaling over the mud-wall, or forcing open the too easily yielding village locks, he helps himself from time to time to what his urgent wants may dictate. It is not often he is able to replace, even if he was so minded, what he has appropriated before the day of reckoning comes. This comes sometimes soon, sometimes late, depending on the time when the paddy is required for Sirkar purpose, or for sale to purchasers. When it does come, there is crimination and recrimination without end, the vettiyàn charging the miràsdàrs and miràsdàrs the vettiyàn. The Sirkar officials, to vindicate its robbed rights, come down heavily on both, and often both are ruined. If the misappropriation is made in very small quantities the way of replacement is very ingenious; a quantity of chaff or a quantity of loose earth or a quantity of big grained sand is put in to make up the measure.

"Time passes and the months denoting favourable markets come round. There now remains the business of disposing of the Sirkar grain from the granaries. Simple as it may appear enormous difficulty is experienced, and we have to face another series of frauds now on the part of the Taluk or superior officers. Tenders are invited, but only a few come and they bid low. Tenders are again invited but to no better purpose. At last come upon the scene a set of unscrupulous, fraudulent tradesmen, or relatives or friends of those in authority or mere speculators professing to give security which is really worthless. These men bid higher and take up the grain in lots as they require. They remove the grain but make no payment down but enter into promises to pay value in eight instalments and profess to give

due security for the fulfilment of the promise. It not unfrequently happens that the purchaser decamps, and his surety is found to have followed suit or found to be hollow. The money due on the sales to the relatives and friends of the officers outstands the longest. If, to avoid these troubles, the grain is taken to the nearest market to be there sold outright for cash, few could be induced to pay the market price, the Sirkar grain being notoriously bad crop and unscrupulously adulterated."

These evils had been foreseen so long ago as 1808 by Major Blackburne who said that the system, 'if long continued' was 'certain to produce corruption in the public officers, fraud and embezzlement in the cultivators and finally oppression and injustice in the Government itself.' Mr. Pennington who visited the State in 1875 denounced the system in no uncertain terms. He said that Government dues were levied in a style unworthy of a civilised Government, that the *amáni* was a subject of 'universal complaint,' and that it was 'a ryotwàri worthy of the darkest ages of administration in Madras when ryots were tortured to pay their assessment.'

EARLIER SETTLEMENTS.

Mr. Pennington's proposals.—At about the time of Mr. Pennington's visit, Sarkíl Bhavàni Sankar Row proposed a money settlement of *amáni* lands on the basis of a five years average of actual revenue, abolishing *pétápétti* (auction) and guaranteeing permanency of tenure. Other cultivable lands lying unoccupied were to be offered at a fixed assessment of Rs. 25 per veli.

But Mr. Pennington advocated a more equitable and scientific settlement similar to that then being carried out in the Madras Districts. According to his scheme the total existing revenue was not to be enhanced, but was to be "distributed over the land in proportion to its productions." He held that this system would be highly advantageous alike to the Sirkar and to the ryot,—to the Sirkar as it would dispense with many of the innumerable *amáni* sibbandis (minor officials) necessary for the

collection of rents in kind, and to the ryot as it would grant him 'fixity of tenure' and free him from persecution by minor officials. As a first step he recommended a preliminary survey of all lands, *amáni* and *inám*, by Mr. Puckle's party which was then completing its labours in the Ettayàpuram Zamíndàri.

It took years to give effect to Mr. Pennington's proposals, while the Sarkíl's scheme being the simpler of the two, was the first to be taken up and worked out.

Under Sir Sashia Sastriar.—The abolition of the *amáni* was the first measure of Sir A. Sashia Sàstriar's administration. Two reasons recommended the step—the critical state of the State finances, and "the universal cry of plunder and extortion everywhere." He has recorded that at his arrival the State was "ringing with the news of the plunder practised every day," for which the only remedy was 'to knock the system on the head.' He forthwith consulted the leading ryots and officers, and ordered the supersession of the system of sharing the produce by one of money assessments.

The *amáni* settlement was not a scientific settlement based on a classification of soils and the application of a scale of sliding rates. It was a rough arrangement for converting existing grain rents into money. To avoid the worry of annual settlements an average for 5 years of both the yield and the market-price was struck, and the State dues so calculated were fixed for the time being.

There were all the materials necessary for such a settlement. The old *amáni* registers furnished the market rates, and the yield. There was an old pymash (survey) for most villages, and where this was wanting one was ordered to be conducted by the karnams. There were also the *pattás* (title-deeds) of somewhat later origin which supplied information about the areas under cultivation, the extent and nature of the holdings, and the out-turn.

The five years chosen for striking the average were 1871–1876. The three immediately preceding years (1876–1879) were excluded because the out-turn in those years was far below normal, while prices were from 3 to 5 times the normal, so that a calculation made on these figures would have been fair neither to the subject nor to the State.

The absence of all remissions was the key-stone of the system. He argued:—"In a settlement based on an average of actual produce of 5 years, remissions in bad years are out of the question. If admitted, the losses of bad years would be saddled on the State while the profits of good years would go exclusively to the ryots and such a small Territory as Pudukkottai could ill-afford to make such sacrifice. The theory of all settlements based on averages is that what the ryot loses in a bad year he makes up in a good one, and there can be no hardship at all where the settlement has proceeded on data admittedly correct, and admittedly more favourable to them, than to the interests of the State." He also feared that the introduction of the principle of remission would afford an opening to the old evil of official corruption. 'The annual inspection and measurement and report' would 'lead to a general scramble for remissions, the end of which is denial of justice to the poor, enrichment of the rich, and utter demoralization of the lower classes of revenue servants to whom such occasions afford a harvest of plunder.'

Suspension was however to be granted in cases of real distress; and special relief was to be given in extraordinary circumstances. Speaking of the latter, Sir Sashia Sàstriar wrote:—"A succession of bad seasons will break their (the peasants') back by the weight of the money assessment. But I trust that no Government could be so blind to its own interests and to the welfare of the ryots as not to grant extraordinary reliefs for extraordinary times, and thereby 'save the goose that lays the golden egg' without which the State itself must cease to exist."

The settlement was begun in 1878–9, and having been retarded for some months owing to an unfavourable season was pushed through and practically completed in 1881–2. Still, for a number of years afterwards, the work continued, as fresh lands came under *amáni* by relinquishment and sale, by resumption of *inám* areas, especially of jàgír tracts which contained numerous *amáni* lands, and by lapses consequent on the expiry of leases.

The general results* of the settlement are tabulated below.

Land.	Extent in acres.	Assessment.	Average assessment per acre.	Similar averages for adjoining districts.		
				Tanjore	Trichinopoly.	Madura.
		Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Dry.	9,051	61,844	0 12 1			
	23,937	21,702	0 14 5			
	21,633	31,297	0 7 1			
Total† ...	66,110‡	70,646	1 1 10	1 3 9§	0 15 1§	1 5 0§
Wet.	25,270	83,233	3 4 8			
	4,391	78,733	4 4 3			
	6,384	34.695	5 6 11			
	3,247	22,492	6 14 10			
	3,212	27,263	8 7 9			
	1,370	13,474	9 13 4			
	846	9,563	11 4 10			
	347	4,446	12 13 0			
	273	3,905	14 4 10			
	127	1,996	15 11 6			
	35	610	17 6 10			
	25	467	18 10 11			
	11	207	18 13 1			
	45,537	2,21,084	4 13 8	5 4 4	5 4 4	4 7 9

* Figures taken from a report to the Madras Government dated 31st March, 1887.

† Including other assessed areas.

‡ Including 39,669 acres already under money assessment.

§ Averages for fasli 1292.

The settlement was on the whole beneficial both to the State and to the ryot. There was an immediate addition of half a lac to the State Revenue, which from that time forwards continued to increase year after year till, as the author of the measure proudly wrote, 'the Treasury was literally full.' The settlement thus laid the foundations of modern Pudukkóttai and provided funds for the improvement of the town, for a liberal reorganisation of the services, and for many schemes for bettering communications and irrigation. Its moral gain to the State was immense. It rid the revenue administration once for all of the corruption which had hitherto been rampant in high places and low.

It presented the ryot 'by a stroke of the pen' with a property in land with freedom to sell, inherit, and mortgage. Though this was from some points of view a boon, it cannot be said to have been an unmixed advantage. It, however did much to emancipate the ryot from the exactions of petty officials. The willing acquiescence of a very large number of ryots in the new arrangement was a measure of its popularity.

There were of course critics even in Sir Sashia Sàstriar's time who complained that the rates were too high owing to the selection of prosperous years in calculating the average, and that the indebtedness of the ryot had in consequence increased, as indicated by wholesale emigrations and litigation with the Nàttukkóttai Chettiars. The first of the objections was untenable since the five years taken formed a typical cycle of seasons excluding very good and very bad years. The charge that it was responsible for emigration was also unfounded. As early as 1876, * that is, long before the *amáni* settlement, the Collector of Madura had complained that Pudukkóttai headed in the statistics of Emigration, and urged the Madras Government to arrest the evil by introducing a more equitable revenue system. The census figures of 1881 and 1891 also disproved the charge. It was also unfair to blame the new settlement for

* G O 248 Revenue Department, 11th December 1876

litigation which had been rife ever since the Chetty community first settled itself in the midst of an impecunious agricultural population.

The settlement did however suffer from réal and serious defects. The rates were bewilderingly various, and differed greatly on adjoining fields of equal fertility.

This was due to the inaccuracy of the pymàsh and *amani* Registers which formed the basis of the settlement. The 'pymàsh' unit was a *kól* of a length that varied from 14 to 16 feet, so that lands of different areas bore the same assessment. The *amáni* accounts had been falsified so that when the average came to be struck, the out-turn of prosperous years was left out of account to favour one ryot and included to the detriment of another. Sometimes the perverse ingenuity of the ryot assisted by corrupt officialdom secured a reduction of assessment on superior lands by coupling them with inferior land and waste. But the worst feature of the settlement was that under it the honest and industrious *amáni* cultivator was highly assessed, because his out-turn was more than that of the idle and the indifferent.

These were defects that it was impossible to correct except by another leisurely and scientific settlement, and it is injustice due to Sir Sashia to say that he was alive to the evil and aware of the remedy. He wrote in 1887 :—

"The crying evils of the "*amáni*" system called for urgent remedy. A new settlement founded on classification of soils and a correct survey of lands, though that was obviously the proper and orthodox course, would have been a work of years, but the case admitted of no delay. Hence the shift ....

"From various causes, chief of which is the inaccuracy of the land measure, the *incidence* of the assessment on the lands is felt to be very unequal *inter se*, while the average burden of the total assessment is by no means heavy. This can only be remedied by a regular survey and settlement..........."

Some minor changes.—The new settlement necessitated a few minor changes. The karnam's fees which had hitherto been paid in kind were commuted into cash at 6 pies per rupee of assessment. *Tirvaipattu* lands (lands paying a money rent) for which no cowles (agreements with the Sircar) were forthcoming were fully assessed. All this was done in 1879–80. In 1881–2 the assessment on lands on which *Viráli* (Dodonaea viscosa) was grown as leaf-manure, was reduced from Rs. 5 to Rs. 2½. The old system of keeping accounts was revised, and it was ordered that *kachâts* or receipts should be regularly issued in acknowledgment of payment of kist.

The abolition of *mahimais* in 1884 was another minor reform. These were petty cesses collected in kind under the old *amáni* system on the threshing floor as contribution for religious ceremonies at Chidambaram, Àvaḍayàrkóil, and Madyàrjunam (Tiruvadaimarudur) by religious mendicants called *Paṇḍárams*, *Aiyavárus* and *Mudaliárs*. They were probably originàlly voluntary alms but had acquired in time 'the character of prescriptive right.' When the *amáni* system was abolished the State undertook to collect the arrears due to the mendicants and to commute into money the previous rates in grain. A few years' experience showed that in addition to the trouble of maintaining separate accounts, this system gave room for exaction and fraud. It was consequently abolished in 1884, and compensation paid to the temples concerned out of a sum of Rs. 1,000 sanctioned from the general revenues.

The Resumption of the Western Palace Jágìr, 1881.—The conditional tenure on which Jàgír *ináms* were held was illustrated by the resumption of the Western Palace Jàgír. As already stated the Jàgírs were by no means free-holds. The lands belonged to the State, the holder had only the right to enjoy the Revenue. In 1881, the Western Palace family had become reduced to great straits by a series of alienations, and the Jàgír was accordingly resumed, and a fixed allowance of Rs. 17,000 was made to the Jàgírdàr and his family in compensation.

The *amáni* and other descriptions of land within the resumed area were assessed according to the new settlement rules then in force.

The Inám settlement, 1888.—Among the many things to which Mr. Pennington drew pointed attention, the antiquated nature of the service inams was one. In 1881–2, that is, in the year of the completion of the *amáni settlement*, the Madras Government advised the imposition of quit-rents and enfranchisement of these inams. In spite of his considerable experience in this kind of work, Sir Sashia Sàstriar proceeded slowly and cautiously, since he did not want to have to deal with too many settlements at a time, while the enfranchisement of inams was a question of peculiar delicacy in an Indian State. Still, in the very same year–1881–2, he collected information on the subject. In 1884–5, a scheme and set of rules were drawn up on the model of the Madras Inàm Settlement Rules and brought into force in September 1888.

The main features of the settlement were as follows:—

i. *Feudal ináms.*—By encroachments upon and misappropriation of the lands of the retainers at the time of their death or dismissal, and by the annexation of the *úḷiam* lands of the attendants whom they had the power to appoint and dismiss, the Sardàrs had come into unauthorised possession of land in excess of their *jìvitams*. Since these lands should properly have lapsed to the State, they were liable to full assessment, but since the Sardàrs had acquired a sort of prescriptive right by long use, the settlement was made on the following principles:—

(1) Lapsed *amarams* and *úḷiams** to be charged half quit-rent as a matter of grace.

(2) Other *úḷiams* to be enfranchised on ⅝ quit-rent, as they were meant to enable the holder to keep up his position.

(3) The full assessment hitherto levied on *veṅgams* to be reduced by one-fourth.

* *Úliam* is service due to a deity, a guru (preceptor) or a superior by birth (Tamil Lexicon). Here *úliams* are lands granted in return for obligatory services to temples or Government.

ii *Other service ináms.*–The reason for interference with these inàms was that they were life-tenures resumable on the death of the holder, or whenever the service became no longer necessary. For the purpose of settlement they were divided into five classes.

"(1) Lands granted for subsistence without any condition of service whatever.

(2) Lands granted for performance of some light service.

(3) Lands held by persons who performed regular service in the Palace.

(4) and (5) Lands held by persons who performed regular service for the Sirkar in villages, *etc.*

The holder of inàms of the first kind, if he objected to enfranchisement, was given a free title-deed with the proviso that the property was to lapse on his death; if he agreed to enfranchisement he was accorded heritable rights on payment of a quit-rent of $\frac{1}{4}$th the full assessment if he had or was capable of having heirs, and otherwise of $\frac{1}{2}$ the full assessment.

The Inàmdàrs of the second class were not allowed the option of continuing the service on the old terms. The inàms were all settled on quit-rents of $\frac{3}{8}$ths or $\frac{5}{8}$ths according as the Inàmdar had or had not and could not have heirs.

Inàms of the third class, were differently treated according as the service was still performed by the family of the original grantee or not. If it was still so performed, the quit-rent was fixed at $\frac{1}{2}$ or $\frac{3}{4}$ of the full assessment, according as there were, or might be, or were not and could not be heirs. Where the service had passed out of the family, monthly salaries were fixed for the service, the land was fully assessed, and the actual holder was confirmed in possession on condition of formal attendance on certain State occasions such as the Dussera. Some of these inàms were also continued on the old terms.

The village service inàms which form the fourth sub-division were similarly dealt with. A reasonable area of land was allowed in lieu of salary for the respective services, and the actual holders were confirmed in their enjoyment free of assessment. Excess areas were fully assessed. All inàms in respect of which the stipulated service was not performed were resumed.

iii. *Brahmadáyams.*—In enfranchising these inàms a distinction was made between those granted for subsistence and *vṛittis* (services). Subsistence inàms were confirmed if still in the possession of the family of the original grantee, but were charged a quit-rent of ⅛th if they had passed into other hands. On the *vṛitti* inams, a quit-rent of one-half or one-fourth respectively was immediately levied if the service was not performed, or was performed by some one wholly unconnected with the original grantee. Where the service was still performed by a descendant of the grantee or some one who had acquired the land by right of succession, the inàms were confirmed on condition that a quit-rent of a half should be leviable on the land whenever the service became unnecessary.

iv. *Minor mányams.*—*Mányams,** such as those granted for the upkeep of water-*pandals, etc.*, were disposed of on similar lines. Where the specified charities were still performed and the buildings and other properties of the benefaction were kept in good condition, the inàms were confirmed subject to the continued fulfilment of the conditions of the grant.

The inàm settlement operations lasted for six years, and came to a close in 1896. During this period, 4,817 grants were settled, with a resulting addition of one lac to the State Revenue. But the benefits were not all on one side. To quote Sir Sashia, the enfranchisement of the inàms "on the payment of a moderate quit-rent in commutation of service was a Magna Charta. Lands which were worth nothing came to be valued hundreds and thousands of rupees on their enfranchisement. Several who were hopelessly involved in debt suddenly found themselves rich and solvent. They who had opposed it at first found themselves mistaken and hailed the enfranchisement of the tenures as their deliverance." But of course there was another side to the shield, and the deliverance, from previous debt accompanied by the acquisition of valuable property was in

* **Manyams** = lands held either rent free or at a low rate of rent in consideration of services to the community or to the State.

some cases merely the signal for the inàmdàrs to plunge still deeper into debt and finally to be forced to surrender their property to their creditors and sink into hopeless impoverishment.

Reduction of amani rates, 1892.—After some years experience Sir Sashia Sàstriar became convinced that the settlement rates of 1879–80 weighed heavily on the ryots, but he took no action for nearly a decade because of the programme of extensive public works which had been inaugurated on the strength of the augmented revenue. In 1892 when the works were nearing completion and the season was unfavourable, he ordered a reduction of about "half a lac or 7½ *per cent*" of the revenue by four notifications all issued within a fortnight. Notification dated 17—12—1892 abolished the special assessment on garden crops for which ordinary dry and wet rates were substituted according as the land was dry or wet. The second notification dated 25—12—1892 abolished the tax on trees on patta lands. The third dated 27—12—1892 reduced the higher rates of assessment on all descriptions of land, wet, achukkattu, and dry as follows—(*a*) all rates of dry lands above Rs. 15 per veli, to Rs. 15, (*b*) all rates on achukkattu lands above Rs. 40 per veli, to Rs. 40, and (*c*) all rates on wet lands above Rs. 60 per veli, to Rs. 60. The fourth dated 30-12-1892 sanctioned proportionate reductions in rates of Rs. 60 and under on wet, and of Rs. 40 and under on achukkattu lands.

Before adopting these measures of relief, the Dewan-Regent—for Sir Sashia was Dewan-Regent now—had not consulted the Madras Government, and Sir Henry Stokes wrote in this connection, * "I must say that I think your proceedings in these matters savour more of the Regent than of the Dewan and that in issuing orders about them without obtaining the approval of this Government you have forgotten that you are conducting the administration of the State under the supervision of the Madras Government." In spite of the reproof, however, his action was upheld. Of the advantages derived by the ryot as

* Quoted in Mr. B. V. Kamesvara Iyar's "Life of Sir Sashia Sástriar."

well as by the State Sir Sashia wrote as follows in his administration report for fasli 1302:—"Freed from the burden of old arrears which used to outstand against them in large amounts in former years and in consequence of the special relief they obtained in the permanent reduction of excessive assessments and abolition of other taxes referred to already, the ryots found it easy to pay up the current dues at least to the utmost extent in their power, and to this circumstance is due that so much proportion of the revenue was realised in such a disastrous season without coercion, and the actual resort to sales were consequently much fewer than in any of the previous years."

Revenue survey, 1893.—We pass now to the Revenue survey operations which were begun in 1893 and completed in 1907. The need for a new survey arose from the incorrectness of the *amáni* settlement based on the old rough-and-ready pymash survey. Though the re-survey was ordered in 1893, it was not begun till 1895 owing to the delay in securing the services of an officer of the Madras Survey department, and to the necessity for sending men to be trained in cadastral work under a survey party working in the Marungàpuri Zamíndàri. In 1895 small schools were started at the taluk headquarters to give the revenue subordinates and others concerned some training in survey. The operations lasted, for one reason or other, for 15 years and terminated on the last day of June 1907.

THE SETTLEMENT OF 1908—12 AND AFTER.

The need for Re-settlement, Sir Sashia Sastriar's Proposals.—G. O. No. 359, of the Madras Government-Political, dated 7th June 1893 may be said to be the starting point of the re-settlement which was finally carried out in the years 1908–12. The Government order was itself the result of certain proposals put forward by Sir Sashia Sàstriar for a fresh settlement to remedy the evils of the original hastily concluded *amáni* settlement. The Dewan Regent regarded his new scheme as the closing and crowning act of his administration and wished to bequeath it as a "real magna carta to the ryots of this State for

all time to come." Absence of remission and moderate assessment were to be the leading features of the new settlement. The old commutation rate of a little over a Rupee fixed in 1879 was to be retained although meanwhile the prices had steadily and permanently risen. In his own words:—

"It is the high price which has been the helping staff o mainstay of the ryots through all the vicissitudes of season whicl are nowhere so severe as in the Pudukkottai State................an I am altogether for leaving this resource of the ryot untouche leaving to him all the benefits of high market prices to counte act the deficiencies of crop for which no remission will l allowed."

The new settlement was intended not to increase the reven but to secure an equitable redistribution of existing assessmen The total assessment on each village as a whole was not to modified; but internal readjustments were to be made. In otl words, the greater inequalities of tenure and assessment betwe village and village were to be perpetuated, but the smal inequalities between the different holders of a village were to rectified. The justification for this was that, "the land reve of each village on actual occupied area determined on act crop results of 5 years which had stood the test of over 14 y in continuous succession through good as well as through seasons experiencing all vicissitudes may be the safest gen standard." There was to be an examination, no doubt, of productive capacity of the lands by classifiers assisted by l panchayats of head-men and mirasdars, but the object was so much to introduce a scientific settlement as to remove smaller inequalities already referred to. In fact Sir S wished to avoid introducing any radical change lest it sl bring the whole administrative machinery to a standsti appreciably reducing the revenue.

But the Government of Madras in their Order al referred to took a different view and recommende fieldwar classification of soils corrected if necessary fo

circumstances of the land dealt with, on a regular system and on a valuation of the half-net." In other words, the Dewan-Regent's suggestions were not approved, except the principle of no remission. The 5 years average, and the old commutation rate of a little over a rupee were to be jettisoned, and a new average based on a period of more than 5 immediately preceding years was to be adopted. Relinquishment was to be freely allowed contrary to the Dewan-Regent's views.

Trial Settlement, 1897.—As the exact effect of a settlement on these lines on the finances of the State could not be foreseen, a trial settlement was ordered in 1897. Some 20 villages in the Álangudi Taluk, which had been already surveyed by the Revenue staff organised in 1893, were selected for the experiment. Lands were classified on the lines of the Madras settlements according to fertility, and the facilities for irrigating and manuring the fields. In fixing the rates, due consideration was given to the old *amáni* settlement rates, to the representations of local panchayats, to crop-experiments, public records and the ryots' statements. Due allowance was also made for unprofitable areas and vicissitudes of season. The principle that the Government share should be half the net produce was finally applied, and the commutation rates were fixed at Rs. 1—5—0 for superior paddy, and Rs. 1—2—0 for inferior paddy calculated on an average of 20 years (1871—1895 excluding famine years). Relinquishment was to be permitted. The results of this experimental settlement as compared with the *amáni* settlement were :—

	Amáni Settlement.			Trial Settlement.		
	RS.	A.	P.	RS.	A.	P.
'Wet' Revenue	17,935	1	5	25,718	15	8
'Achukkattu' Revenue ...	751	14	3	1,160	13	4
'Dry' Revenue	4,137	8	7	7,570	10	4
Total ...	22,824	8	3	34,350	7	4

The trial settlement gave an increase of revenue by 34 per cent for the area under investigation, and on this basis an addition of a lakh and a half for the whole State was to be anticipated—a conclusion that must have come as a surprise to those who had hitherto considered the old settlement onerous.

Resumption of the Chinnaranmanai Jagir*—On the death of the Jagírdàr in 1903, the Chinnaranmanai Jàgîr was managed for some months by the State and finally resumed; money pensions were granted to the surviving members of the family. The lands were eventually brought under survey and settlement.

The Settlement of 1908-12*—After the trial settlement in 1897, nothing further was done for another ten years. From 1897 to 1903—4, action was delayed on the ground that the simultaneous maintenance of two departments—the survey and the settlement—would be too expensive, and it was hoped that the settlement might be taken up as soon as the survey was over. But the survey dragged on, as we have seen, till 1907, so that actual settlement operations could not be begun before 1908. A scheme report for two taluks was submitted in December 1909. The actual settlement was begun in 1910 and completed in 1912.

This was the first systematic and scientific settlement in the State. It followed in the main the same lines as the ryotwari settlements of the Madras districts conducted between 1885 and 1888. The work of such settlements falls into three natural divisions:-(i) the survey and demarcation of land into separate numbered fields; (ii) the grouping of such fields in classes called *tarams* according to (*a*) the distance of the land from communications and market, (*b*) the facilities for irrigation, and (*c*) the nature of the soil; (iii) the ascertainment of 50 per cent of the net produce involving (*a*) the selection of a standard crop, (*b*) the determination of the gross out-turn and (*c*) the calculation

* Both Dévastánam and *Ayan* lands were taken up for settlement in 1908-12, since the Dévastánam lands had been amalgamated with *Ayan*. For details of this amalgamation, see chapter on "Dévastánam and Charities."

of its value having regard to current market prices and the average price of former years, and finally (*d*) the application of these rates to the *tarams* after making suitable deductions for cost of cultivation, vicissitudes of season, and unprofitable areas.

The essential difference between this and the old *amáni* settlement was that instead of taking as basis the average of the actual yield of each holding for a number of years, the new settlement attempted to determine what a land of a particular quality might be expected to yield under normal conditions.

The *achukkattu* lands which were recognised as a separate class in all the previous settlements were transferred to 'wet' if paddy was regularly grown, and otherwise to 'dry'. This was done partly to simplify the system, and partly to discourage the multiplication of small tanks irrigating *achukkattu* to the detriment of larger and older tanks in the neighbourhood.

Since almost all the villages were similarly situated with reference to markets, roads and railways, no regular classification was made of dry land; but where it was necessary to make some concessions the whole village in question was placed in a lower *taram* than it otherwise belonged to. The irrigation sources were classified into five classes as follows:—

First class—all irrigation sources whether anicuts, or river channels, or tanks, capable of irrigating their ayacuts for not less than eight months in the year;

Second class—all those capable of irrigating their ayacuts for less than eight but not less than five months;

Third class—all those capable of irrigating their ayacuts for less than five but not less than three months;

Fourth class—all those capable of irrigating their ayacuts for less than three months but not less than one month; and

Fifth class—all those capable of irrigating their ayacuts for less than one month.

Only 2 'series' of soils were recognised—Regar and ferruginous; and these were sub-divided into 3 'classes' and 5 'sorts'; and grouped into 11 '*tarams*' for 'wet', and 8 *tarams* for 'dry'.

The standard crop was paddy for wet land, and ragi and varagu in equal proportions for dry. The out-turn was fixed on

a combined basis of crop-experiments, local enquiry, and the normal yield of adjacent and similar British areas. The crop experiments however were not considered to yield normal results, because when they were made, the season was less favourable than the normal, and consequently the results were enhanced arbitrarily by 20 per cent.

There was considerable difficulty in fixing the commutation rates, since the statistics for 20 years required for striking the average were not on record, or if they were, could not be relied on. The averages of the Faslis 1288–1318 were finally taken, and a deduction of 15 per cent was made from them for merchant's profits and carting expenses. The following were the rates finally fixed as compared with those of Tanjore:—

Crop.		Pudukkóttai.	Tanjore.
Paddy	...	Rs. 160 per garce.	Rs. 121 per garce.
Ragi	...	„ 175 „	„ 134 „
Varagu	...	„ 100 „	„ 76 „

A liberal deduction of 25 per cent was made in respect of seasonal vicissitudes and unprofitable areas, since it was considered that a more than technical error had been committed in the Revenue survey by including channels and waste lands in the holdings. Another consideration was the absence of any provision for annual remission. For superior lands under the first two classes of irrigation sources, a deduction of only 20 per cent was made. It may be noted here that in the Tanjore and Trichinopoly districts the allowance made for wet was 15 per cent in delta and 20 per cent in non-delta tracts, and for dry 20 per cent all round, and in Madura, 20 per cent for both wet and dry.

The rates per acre for cultivation expenses finally fixed compared as follows with those of the adjoining districts:—

			Wet.	*Dry.*
			RS. A. P.	RS. A. P.
Pudukkóttai	...	...	16–0–0	7–0–0
Tanjore	...	...	11–0–0	5–8–0
Trichinopoly	...	...	11–0–0	5–8–0
Madura	...	...	13–3–5	3–6–4

The money rates were finally fixed in 11 *tarams* for wet and 8 for dry lands as shown in the following table:—

	Primary Tarams.	Settlement rate in the State.	Corresponding Tanjore rates.	Corresponding Madura rates.	Corresponding South Arcot rates.	Chingleput re-settlement rates increased by 15%.
			With 12½% increase.			
Wet Lands.	I	10-0	7-14/(7-0)	9- 9/(8-8)	10- 2/(9-0)	8- 8
	II	9-0	6-12/(6-0)	8- 7/(7-8)	9- 0/(8-0)	7- 4
	III	7-8	5-10/(5-0)	7- 5/(6-8)	7-14/(7-0)	5-12
	IV	6-0	5- 1/(4-8)	6- 3/(5-8)	6-12/(6-0)	4-10
	V	5-0	4- 8/(4-0)	5- 1/(4-8)	5-10/(5-0)	4- 0
	VI	4-0	3-15/(3-8)	3-15/(3-8)	5- 1/(4-8)	3- 8
	VII	3-8	3- 6/(3-0)	2-13/(2-8)	4- 8/(4-0)	2-14
	VIII	3-0	2-13/(2-8)	2- 4/(2-0)	3-15/(3-8)	2- 4
	IX	2-8	2- 4/(2-0)	2- 4/(2-0)	3- 6/(3-0)	2- 0
	X	2-0	1-11/(1-8)	2- 4/(2-0)	2-13/(2-8)	1-12
	XI	1-8	0- 0	0- 0	0- 0	1- 8
Dry Lands.	I	3- 0	3- 6/(3- 0)	2- 3/(2- 0)	3-15/(3- 8)	3- 6
	II	2- 8	2-13/(2- 8)	1-11/(1- 8)	3- 6/(3- 0)	2-12
	III	2- 0	2- 4/(2- 0)	1-6½/(1- 4)	2-13/(2- 8)	2- 4
	IV	1- 8	1-11/(1- 8)	1- 2/(1- 0)	2- 4/(2- 0)	1-10
	V	1- 2	1-6½/(1- 4)	0-13½/(0-12)	1-11/(1- 8)	1- 4
	VI	0-14	1- 2/(1- 0)	0- 9/(0- 8)	1-6½/(1- 4)	0-12
	VII	0-10	0-13½/(0-12)	0-6¾/(0- 6)	1- 2/(1- 0)	0- 8
	VIII	0- 6	0- 0/(0- 8)	0-4½/(0- 4)	0-13½/(0-12)	0- 6
	IX	0- 0	0-4½/(0- 4)	0- 0	0- 9/(0- 8)	0- 4
	X	0- 0	0- 0	0- 0	0-6¾/(0- 6)	0- 0

NOTE:—The figures within brackets were the corresponding rates prevailing at the time without the 12½ per cent increase.

The following are extracts from the Darbar's Orders on the Settlement Officer's Scheme Report:—

"Regarding wet rate 20 per cent deduction is allowed for vicissitudes of season for the first three Tarams and 25 per cent for the lower Tarams.

"The special treatment of lands under the first three Tarams is justified by two considerations. In the first place, these lands are all irrigated by 1st and 2nd class sources of

irrigation and are consequently less liable to failure. In the second place, the best lands under 1st and 2nd class sources (which comprise the first 3 Tarams) may be expected in normal years to yield a second crop for which no separate charge is made. Rs. 7—8—0 is the rate adopted for the third Taram to bridge the drop to Rs. 6 accepted for the fourth Taram."

"Regarding wet rates in the case of Tanjore, Madura and South Arcot, 12½ per cent has been added to the existing rates as representing roughly the enhancement they might be expected to bear if these districts were under resettlement to-day.

"The present rates obtaining in the State are so anomalous that detailed comparison is out of the question. The average incidence of assessment is increased by 3 annas 11 pies an acre or 5 per cent.

"In making comparisons with the rates obtaining in Madras Districts, it must always be remembered that no charge is proposed for second crop cultivation in Pudukkóttai. This concession (supposing the second crop to be half the value of the first crop) may be taken as equivalent to ¼ the assessment of the first three Tarams, 1/8 the assessment of Tarams IV and V and 1/16 the assessment of Tarams VI and VII. Under Tarams VIII to XI the extent of double-crop land will be negligible.

"The rates thus calculated will be as follows:—

Taram.	Rate. Rs. A. P.	Deduct ¼. Rs. A. P.	Single crop rate. Rs. A. P.	Taram.
I	10 0 0	2 8 0	7 8 0	I
II	9 0 0	2 4 0	6 12 0	II
III	7 8 0	1 14 0	5 10 0	III
		Deduct 1/8.		
IV	6 0 0	0 12 0	5 4 0	IV
V	5 0 0	0 10 0	4 6 0	V
		Deduct 1/16.		
VI	4 0 0	0 4 0	3 12 0	VI
VII	3 8 0	0 3 6	3 4 6	VII
		No deduction.		

Taram.	Rate. RS. A. P.	Deduct ⅓. RS. A. P.	Single crop rate. RS. A. P.	Taram.
VIII	3 0 0	...	3 0 0	VIII
IX	2 8 0	...	2 8 0	IX
X	2 0 0	...	2 0 0	X
XI	1 8 0	...	1 8 0	XI

"These theoretical figures correspond closely to the Tanjore rates (though in reality they are lower, the Tanjore rates not including any rate for first class sources of irrigation) and compare favourably with the Madura and South Arcot rates.

"The incidence of dry assessment is increased by 3 annas 2 pies an acre or 20 per cent as compared with the existing assessment but after inspection by the Revenue Settlement officer it is anticipated that more correct classification will reduce the incidence by 6 pies an acre or 3½ per cent at least. The rates compare favourably with the rates of selected Madras Districts except in the case of Madura where the rates are abnormally low."

A uniform water-rate of Rs. 3 an acre for wet and Rs. 2 for dry lands was introduced. No remission for baling or lifting was allowed, since there were very few lands where this was necessary.

Finally, it was decided that the Settlement should remain in force for 30 years.

Simultaneously with the Settlement, some reforms of a minor character were effected in respect of (i) the tree-tax (ii) *Swatantrams* and (iii) *Úliams.*

(i) ***Revision of tree-tax.***—Under the old order of things much room existed for fraud and oppression in the matter of the tree-tax. The old rates were numerous and uncertain, and were charged even upon trees of little economic value such as the ***vilvam*** (***Aegle marmelos***) and the ***véla*** (different species of ***acacia***

or *Vela*). The assessable trees were now limited to a smaller number at the rates fixed as follows:—

Mango, tamarind and jack	4 annas.
Cocoanut, iluppai (*bassia latifolia*), bamboo, and silk-cotton.	2 annas.
Palmyra	3 pies.

Trees were dealt with as follows:—

(*a*) Trees on Patta lands:—(i) Wherever the tree pattadar and the land pattadar were the same, the tree tax or land tax whichever was less was remitted. (ii) Where the tree pattadar and land pattadar were different, and trees were held on permanent leases, the tree tax or land tax whichever was less was remitted provided that either the tree pattadar or the land pattadar surrendered his rights to the other.

(*b*) Trees standing on Inàm lands:—The existing tax was continued and was regarded as part of the quit-rent due for the land.

(ii) *Abolition of Swatantrams.*—Another relief to the ryot was the abolition of the ***swatantrams*** of 1 per cent and ¾ per cent payable to the mirasdar and the ***vettiyán*** in consideration of their services to the State and the ryot. Now that the ***amáni*** days were over they had hardly any work to do, except by way of safeguarding collections till the day of remittance, and assisting at distraints. It was contended, and rightly, that if the Sirkar still required their services it was for the Sirkar to remunerate them; as for the mirasdar's services, such as supervising repairs to tanks, and arbitrating in disputes about water, they were seldom if ever performed; at any rate they were not required. So the ryots refused to pay the ***swatantram*** to the mirasdar, except in a few villages where his personal influence was high. As for the ***vettiyán***, he managed to secure his fees by acting as every body's messenger and miscellaneous servant.

The settlement abolished all ***swatantrams***, and provided an increased scale of pay for the village sibbandis (menials). To cover the cost of the new scale, a village service cess of one anna in the rupee of assessment was recommended in place of the old ***kanakkuvari*** of 6 pies.

(iii) *Abolition of úliams.**—The substitution of a light cess for minor *úliams* was another benefit that the new settlement conferred on the ryot. Every pattadar was bound to render services to temples, and in the old days these were willingly rendered by a population wholly Hindu. But owing to efflux of time and social changes, the minor services had become either obsolete or a cause of legitimate grievance. For example in a village where originally four chucklers (leather-workers) provided hides for the temple drum at one hide each, four hides continued to be exacted even though there was only one chuckler surviving. When a person held lands near two temples, his services were

* Two other *úliams* may be mentioned here.—The *Véttai úliam* or furnishing beaters for His Highness' shoots is a service that the people enjoy as a tamasha and voluntarily render out of loyalty to the Ruler. The service demanded of ryots where there is an imminent danger of the embankments of tanks or other irrigation sources breaching was made lawful by the Kudimarámat Regulation (IV of 1903), a Regulation drawn on the lines of the Madras Compulsory Labour Act I of 1858. The nature of the work that the ryots have to execute, and the penalty leviable for failure to execute such work are laid down in Chapter VII of Regulation No. III of 1933 which was passed by the Legislative Council without a dissentient vote. Under Section 40 of the Regulation, every person holding lands in the ayacut of a tank is liable to pay four times the value of any work that he is bound to, but does not execute; and under Section 41, instead of enforcing the liability to perform customary labour, the Darbar may levy an annual cess from those who are bound to contribute such labour. The Darbar have granted various concessions in regard to the enforcement of these obligations. In the first place they are only enforced in respect of tanks, the bunds of which have been put in thorough order. If ryots fulfilled them they are allowed to appropriate the fish in the tank, to which under the Regulation they have no claim. With characteristic indifference for their own and the common good, the ryots have generally neglected their obligation. In some tanks it was found that the cost of works that had to be taken up by the Public Works Department owing to the ryots' neglect and of which the cost had to be recovered from the ryots worked out to a very high rate per acre on the ayacuts. The Darbar have recently (September 1937) decided therefore that until further orders the amount recoverable from the ryots on this account in any year shall be limited to a maximum of eight annas per acre on the ayacut.

required at both. The state of things therefore called for a remedy and the new settlement provided one. Obsolete services were simply abolished, as were *savári úliams* such as furnishing supplies to officers on circuit. For information regarding *úliams* connected with temple services, the reader is referred to the chapter on " Devastanam and Charity."

For the first time the right of relinquishment was conferred on the ryot. The commencement of the fasli was fixed as the time when such relinquishment would be accepted. Since the new settlement increased the revenue payable by some land-holders of the old *mámúl ijara* and *kadamai* tenures by over a hundred per cent, it was ordered that the maximum of the new scale should be introduced gradually by 12 annual increments.

Results and Review of the Settlement.—The result of the settlement on the whole was a 20 per cent increase in 'dry' assessment, a 2 per cent increase in 'wet', and a total increase of 7 per cent on all lands taken together.

The leading features of the settlement were, to use the language of the Darbar's Order R. C. 532/C of 1910, dated 11th July 1910, 'continuity of policy and simplicity.' It was a natural and inevitable sequel to Sir Sashia Sàstriar's settlement of 1879. Its object was not to increase the revenue but to remedy existing inequalities and injustices. Under the *amáni* settlement the wet rates were too high, and the dry rates too low. The incidence was also arbitrary and had no reference to the capacity of the land. Under the new system, the wet rates were lowered; the dry rates enhanced; and the burden on the land was adjusted to its fertility by a careful examination and classification of the soil. The *amáni* settlement had no doubt done much to curb the rapacity of the revenue official; but the new settlement carried the emancipation of the ryot from official tyranny still further by abolishing *úliams* and *swatantrams.* Again, the old settlement, while it commuted grain rents into their money value perpetuated a multitude of rates; the re-settlement replaced these by a few *tarams.*

The absence of any provision for remission in the settlement will not surprise the reader who has closely followed the story of Land Revenue so far. The principle of 'no remission' was a feature of Sir Sashia Sástriar's *amáni* settlement, and of his proposals for a re-settlement; it was defended in G. O. 359 dated 1893. It was retained in the settlement coupled with such compensating concessions as the 25 per cent reduction for vicissitudes of season and the freedom from any charge for a second harvest. Remission is in fact not an universal feature of Indian revenue settlements. On the contrary it is more or less peculiar to Madras. It is true that in the old *taramfysal,* remission had been allowed for some faslis in some villages of the Viràlimalai firka, but this was quite an exception. The Revenue department was not trained or could not be trusted to conduct the field-by-field inspection (*azimash*) that a system of annual remissions necessitates. Above all, Land Revenue is the mainstay of the State finances; and to subject it to the fluctuations inseparable from the grant of annual remissions was to jeopardise every scheme of reform and progress necessary to a modern administration.

The Darbar in their orders on the Settlement Scheme Report decided that though remission was not to be allowed in ordinary years on the Madras system, yet in years when wet crops failed completely over extensive areas, suspension of revenue collection would be permitted, and in exceptional cases when wet crops proved a total failure over widespread and well-defined areas, remission of the whole or part of the kist would be granted. Extension of the remission principle beyond this was in their opinion impracticable; but on the other hand, as explained above, no charge is made for double crop cultivation. In order to prevent the accumulation of arrears of suspended revenue, the Darbar, acting on the advice of the Madras Government, decided that all arrears that had remained unrealised for three faslis should be automatically written off as irrecoverable at the beginning of the fourth year.

Old Arrears.—The grant of suspension in times of distress had led, during the period of the *amáni* settlement, to the accumulation of heavy arrears. In the years that immediately succeeded the *amáni* settlement, such accumulation was checked by somewhat free recourse to coercive process, and by annually writing-off irrecoverable dues.

In 1903 therefore, the Madras Government remarked how useless and inadvisable it was to keep arrears pending when they had clearly become irrecoverable, and how such a course directly encouraged blackmailing and oppression by subordinates.

In 1906-7 sanction was granted to the compounding of old arrears prior to 1904 at 50 per cent, but this was not done on the scale anticipated. The arrears amounted to 8 lakhs or nearly a year's revenue, and the Madras Government again pointed out that 'leniency which results in saddling the ryots of the State with a load of debt which they cannot be expected to clear off for many years appears to the Government impolitic...........The accumulation of the arrears of assessment on land impedes transfers and mortgages, injures credit, interferes with the making of improvements, discourages the ryot and places him at the mercy of subordinate revenue officials'. (G. O. No. 102 dated 6th March 1907).

Still the old arrears had to be collected and the task seemed almost Herculean; but the Augean stables were finally cleansed by holding a series of special jamàbandis between 1909 and 1912 at which, after the position of each ryot so indebted to the State had been examined remissions of from 5 to 95 per cent were freely granted to the poorer ryots while other balances were immediately collected. In this manner, arrears of Rs. 5,10,138 excluding Rs. 1,09,030 of quit-rents were wiped off in a few years, and 95 per cent of the landholders were finally freed from this burden by 1912 when the work was practically brought to a close.

The Manóvarti Jágìr.—The Manóvarti or Rànis' Jàgír the revenues of which were being enjoyed by His Highness the Ràjà was brought under the new settlement, and amalgamated with the *ayan* lands in 1911–2. At the same time a sum of Rs. 18,000 per annum was set apart from general funds for the future maintenance of the Rànis.

SOME FEATURES OF THE REVENUE DEPARTMENT AT PRESENT.

Land Records Section.—The special jamàbandi alluded to above revealed that much of the delay in revenue collection was due to confusion in the revenue registers and accounts as a result of which it was not clear what revenue was due and from whom. A new department to look after land records and patta transfers was therefore created out of the old department of Land Records Maintenance and was charged with the preparation of field measurement books, *etc.*

In fasli 1322, the Darbar sanctioned Rs. 9,000 for the improvement of the Land Records Section. Much of this was spent in endeavouring to produce a satisfactory field measurement book that would show the sub-divisions effected at the original survey and subsequently at the Settlement. The work was attended with considerable difficulty, and progress was slow. In the next fasli, field measurement books of 71 villages were revised of which 20 were ferro-printed and 11 were handed over to the Revenue department. By fasli 1327, the books of all the villages except 9, had been revised. In 1329, the Darbar framed rules on the Madras model for the maintenance of Land Records. In 1332, the field books and demarcation sketches for karnams were supplied to the Taluks. Since it had been found in fasli 1334 that the field measurement books were not up-to-date and the village maps in the possession of the karnams were much damaged, the work of revising these was again taken up. In 1338, a Photo Section was added to the Land Records Branch, and ferro-copies of plans were prepared and village maps printed on the scale 16 inches to a mile by the Van Dyke process without the intervention of photography. The new sub-divisions

were then incorporated in the village officers' copies of the field measurement books and in those maintained in the Taluk offices. In fasli 1342, a special staff was appointed to replace damaged or missing pages in the field measurement books and bring them up-to-date.

The primary work of the Land Records Section is to maintain the original Survey and Settlement records, and to correct the block maps and land registers. A set of village maps is maintained up-to-date in this section. In fasli 1345 alone, village maps (on the scale of 16 inches to a mile) relating to 76 villages (15,843 survey fields) were revised. The Photo and Litho Section prepares all prints for the Revenue Department and supplies ferro-prints for the Public Works Department.

In fasli 1325, the Darbar sanctioned the opening of a survey school to train Revenue subordinates and karnams in chain survey, and two batches were trained in that year. Though at first the school was meant to be temporary, it has been held in almost every year subsequently.

All the Chinnaranmanai Inàm lands were brought within the scope of the Revenue Settlement. There were about 1,55,000 acres of Inàm lands bearing a quit-rent of about Rs. 1,36,300. Such records as there were, relating to them were neither intelligible nor reliable, and it was in many cases hard to ascertain who were the real owners. Much difficulty was felt in the collection of the quit-rents, and a simple survey of these lands was necessary to facilitate the work of the Revenue officials. A beginning was made in fasli 1323, and before the end of the fasli, field work in 27 villages had been completed. By fasli 1324, the settlement of the minor inàms had been completed and that of the major inàms almost completed. Simultaneously the conditions of the *lávanams* (service inams) were examined, and transfers of *lávanams* were effected wherever necessary. It was at first proposed to prepare major inàm *adangals* * to facilitate

* The *adangal* is the detailed account showing the lands cultivated and the nature of the cultivation.

the disposal of patta transfer applications relating to major inàms; but subsequently, the Darbar considered it sufficient to have all the *Isanváris* * transcribed on paper and the worn out leaves of the pymash and the fysal registers renewed.

The survey and settlement of *nathams* or Chetti villages where encroachments were common, called for attention. By fasli 1322, the survey of 24 *nathams* and two unions had been completed. The work has since been progressing steadily. A temporary establishment of two inspectors was sanctioned in fasli 1339 to bring the natham records up-to-date, but in faslis 1342 and 1343 only one Inspector was working. From July 1, 1935, another temporary staff was appointed under a Natham Settlement Tahsildar, but in the course of the fasli, the Natham Tahsildar's post was amalgamated with that of the Land Records Tahsildar. The groups of villages forming Konàpet, Nachàndupatti, Valayapatti, Ràmachandrapuram and Visvanàthapuram are among the more important nathams surveyed. It is proposed to take up Mélasivapuri, Embal and other nathams shortly.

In fasli 1339, the Darbar revised the rules relating to the sale of Government lands for house sites and the conversion of agricultural lands to non-agricultural purposes. Government sites had previously been sold as freeholds, that is to say, free from payment of any ground-rent to the State for all time to come. Private agricultural lands on which houses had been built were allowed to be converted into freeholds on payment of a lump sum called Redemption price ranging from Rs. 300 to Rs. 1,500 an acre. This method was found to be economically unsound. The State lost both the benefit of the rising land values and the agricultural assessment that it had been deriving from these lands. The Darbar therefore revised the rules so as to provide for the levy of a small Condonation price as it was called, (not exceeding Rs. 4 per *kuli*), for the conversion of agricultural lands into house sites, and for the imposition of a

* *Isanváris* are *chittas* or ledgers showing assessment arranged under the names of the several individual holders.

ground-rent revisable once in 20 years, on all lands used as house sites—whether Government sites granted as such or agricultural lands on which houses were built. The initial ground-rents fixed were moderate. There was a certain amount of agitation against the levy of ground-rent on private agricultural lands used as building sites. The Darbar discussed the matter with representatives of the Nàttukkóttai Nagarathàr community mainly affected, and though they were not convinced that the imposition of a small recurring ground-rent could constitute any substantial hardship or inconvenience to the owners, yet, 'in view of the continued loyalty and well-known charitable activities of the Chetti community,' and as a concession to their sentimental preference for the traditional system of dealing with their house sites, they ordered in December 1934, that the owner of patta lands who had built upon them might at his option either pay Redemption price and hold the land free-hold thereafter or pay a smaller condonation price and annual ground-rent in addition.

In fasli 1345 the preliminary demand on the Nagarathars amounted to Rs. 1,07,628 (Rs. 48,404 by way of Redemption and Condonation prices, and Rs. 59,224 by way of cost of site encroached upon); but only a sum of Rs. 40,151 was actually collected. The Nagarathàrs who are hard hit by the economic depression have not been able to pay up the Redemption or Condonation prices, and the Darbar have granted an extension of time for such payments in deserving cases.

The Land Records Deputy Tahsildar is now in charge of the Inàm and Natham Settlement Sections.

Disposal of unoccupied lands.—The problem how to encourage the ryot to take up unoccupied but arable lands has for a long time engaged the attention of the Darbar. In 1901-1902, a special officer and staff were appointed to investigate it, and the Darbar declared their intention of lowering assessments and improving irrigation. The settlement of 1908-1912 stimulated the occupation of waste lands.

In fasli 1330 in order to encourage ryots to depend less upon common grazing grounds, and to grow fodder for their cattle, the Darbar ordered that kist on lands used exclusively for raising fodder crops should be remitted. In fasli 1335, the Darbar published in the State Gazette a list of 30,000 acres of land fit for assignment for cultivation. To help the reclamation of waste lands they introduced the system of granting agricultural loans at low rates of interest payable in easy instalments and also loans for digging wells at 4 per cent interest repayable in 10 to 20 years. Attempts were also made to encourage arboriculture. A few compact and fairly big sized blocks in Àlangudi Taluk under the control of the Revenue Department were planted with cashew trees, and wells sunk in them. The rule requiring the payment of a lump sum (*Kudiswámiam*) for waste lands assigned for cultivation was withdrawn and it is now the policy of the Darbar to assign such lands as far as possible free or in exceptional cases, to sell them by auction. In fasli 1345, as a further encouragement to ryots to take up waste lands for cultivation, the Darbar sanctioned the assignment of lands on the cowle system under which waste lands taken up for cultivation are charged only $\frac{1}{3}$ of the assessment in the first year, $\frac{2}{3}$ in the second year, and the full assessment from the third year onwards. As a result of these concessions, there was an increase of 499 acres under occupied ryotwari land in fasli 1346. The following statement gives the extent of assigned lands and the amount realised as *Kudiswámiam* in fasli 1345.

Items.	Extent in acres.	Assessment.			Kudiswâmiam prices.		
		Rs.	A.	P.	Rs.	A.	P.
1. Assignment under Darkhast Rules.—							
(*a*) for fixed price ...	344·66	568	9	0	863	10	3
(*b*) in auction sale ...	101·90	221	9	0	3,573	2	10
2. Special grant of lands under special or general orders of the Darbar or the Dewan Peishkar ...	86·85	135	3	0	900	0	0
Total ...	533·41	925	5	0	5,333	13	1

The following is a statement of Dharkast applications in fasli 1345.—

Taluk.	Number pending at the beginning of the fasli.	Number received in the fasli.	Total.	Disposal. By grant.	Disposal. By re-jection.	Disposal. Total disposal.	Balance.
Álangudi ...	256	425	681	109	338	447	234
Tirumayam ...	138	266	404	57	174	231	173
Kolattur ...	328	523	851	150	333	483	368
Total ...	722	1,214	1,936	316	845	1,161	775

Administration: The Revenue agency.–Mr. Blackburne's report quoted above (page 339) is evidence of the utter confusion that prevailed a hundred years ago in the Revenue administration. There were revenue officials, it is true, with the Sirkíl and the Kàrbar at their head; but there was no cutcherry (office), no regular discharge of business, no issue of receipts, no permanent division of the country into taluks and worst of all, no supervision. Occasionally the wrath of the superior authorities was kindled and bolts descended in the form of sudden dismissal or suspension.

The appendices to Mr. Bayley's report to Government dated 1841, give an idea of the revenue divisions that had come into existence since Mr. Blackburne's time. There were 4,229 villages grouped into 75 vattams or circles, and comprised in the following 5 taluks.

1. * Covenaud or southern taluk including Cavenattu Pannay.
2. Perumaunaud or western taluk.
3. Colatoor or northern taluk.
4. Aulangoody or eastern taluk including Karambacoody.
5. Keelanilai taluk.

In Mr. Morris' time the number of taluks was reduced to three with a firka or revenue sub-division for each.

* The names of taluks are spelt as in the original.

The revenue divisions and the officers in charge were as follows at about the time of the *Amáni* Settlement (1879–83):—

Taluk.	Officer.	Vattams.	Villages.
Alangudi	Tahsildar	21	209
	Deputy	8	61
Tirumayam	Tahsildar	19	384
	Deputy	9	156
Kolattúr	Tahsildar	23	522
	Deputy	6	248
		86	1,580

These officers were also Magistrates invested with second and third class powers; they were subordinate in revenue matters to the Kàrbàr and Deputy Kàrbàr. The vattam and village sibbandis were subordinate to the Tahsildars and Deputy Tahsildars. The Sirkíl now ceased to be directly connected with the details of revenue administration, and the days had certainly gone by when he was expected to sign receipts for kist. Even in Mr. Morris' time the Sirkíl's and the Kàrbàr's offices were identical. In 1880 the Kàrbàr corresponded to a District Collector and Magistrate, and was assisted by a Deputy Kàrbàr in charge of Devastànams and Chattrams. In subsequent years the latter officer was placed in charge of the Treasury also and was called the Treasury Officer.

The vattam sibbandis were (1) the monigàr, (2) samprati (clerk), (3) the kanakkan, (4) the miràsdàrs, (5) the nótakàran (shroff), (6) the kangàni, (7) the vettiyàn; with a vichàranakaran or supervising officer for large vattams.

The Administration Report of 1881–2 gives the following particulars relating to their duties and to the remuneration in grain fees and fixed salaries they received:—

"The first two and the last are paid officers of the State. The third is also a paid officer sometimes, *i. e.* when he is appointed by the State, but generally the kanakkans are hereditary office-holders. The mirasdars are hereditary, and are

allowed *úmbalams* or Inàm lands from the State, and they also are entitled to ***swatantarams*** or grain fees from the cultivators. The Nótakàran is generally a paid officer of the State, but oftentimes he is also hereditary and appointed by Mirasdars. He collects the kist money and keeps it till remittance. Many incumbents are of the Paraiya caste, being most trustworthy. The kangàni is the peon of the vattam under the monigar. He is always a paid officer of the State. The vettiyàn's chief duty in his relation to Sirkar is to handle the rod and to tell the tale at the measurement of lands. He sometimes does duty as peon or Nótakàr. Amaram or militia peons who formerly used to watch the crops as kangànis, now sometimes assist the village officers in collecting the kists."

There were in addition separate departments, with their numerous subordinate staffs, for Devastànams, Chattrams and Jàgírs.

After the abolition of the *amáni* the village staff was considerably reduced but its pay was improved. There was a further reduction of staff at the time of the resumption of the Jàgírs and of the amalgamation of Devastànam and Chattram revenues.

In 1895, the Tahsildars were relieved of their magisterial responsibilities so that they might give their full time to revenue work. Concurrently with the settlement of 1908–12, the pay of the lower staff was revised and improved.

The settlement of the Inams and of the villages constituting the resumed Chinnaranmanai Jàgír necessitated the appointment of a separate officer for Inàm Settlement, and with effect from January 1, 1920, the Inàm Settlement Department was organised and the Land Records and Natham Sections were placed in the charge of a separate Tahsildar. In fasli 1333 the posts of Land Records Inspectors were abolished, and the work of Land Records maintenance was entrusted to the Revenue Inspectors. In fasli 1334, it was found necessary to bring the field measurement books up-to-date, and a Land Records Deputy

Tahsildar was therefore appointed. A special Tahsildar was in charge of Natham settlement during faslis 1337 and 1338.

Since fasli 1337, the Dewan Peishkar has been relieved of practically all his magisterial work by the appointment of the Additional Chief Magistrate.

Village Officers' Special Test Examinations are held annually. In 1340, the Darbar sanctioned the award of prizes for good work to Karnams and Moniams. The best karnam and the best moniam in each firka are now given a money prize of Rs. 9 each and the next best karnam and moniam are awarded certificates.

With effect from January 1, 1933, the Tottenham office system embodied in the Madras Revenue Department District Office Manual was introduced in the Dewan Peishkar's office and in the Taluk offices. It has since been introduced in all departments of the State.

At present the State is divided, for purposes of Revenue administration, into three taluks, Àlangudi, Tirumayam and Kolattur, each under the control of a Tahsildar. Before February 1, 1936, each taluk was divided into five Revenue Inspector's divisions, but as the result of the amalgamation of the Salt, Abkari and Forest Departments with the Revenue Department, each Taluk is now divided into six firkas. Each firka is under the control of a Revenue Inspector who works under the Tahsildar of the taluk and in addition to his Revenue functions, discharges those of an Inspector of Salt, Abkari and Forests.

The Dewan Peishkar is the head of the Department assisted by a Personal Assistant in charge of Devastànams, a Land Records Deputy Tahsildar in charge of settlement, survey and Nathams, and a Sheristadar, the head of the ministerial establishment.

The present establishment in each village consists of a moniam, a karnam, and one or more miràsdars, vichàrippus and vettiyàns

The names of the new Revenue Inspector's firkas into which each of the three Taluks was divided with effect from February 1, 1936, and of the Vattams comprised in each firka are given below:—

ALANGUDI TALUK.

I. Pudukkóttai firka.

1. Sembáttur
2. Puthámbur.
3. Mullur.
4. Vágavásal.
5. Pudukkóttai.
6. Kavinád East.
7. Kavinád West.
8. Tirugókarnam.

II. Álangudi firka.

1. Mángádu.
2. Vadagádu.
3. Kiláttur.
4. Meláttur.
5. Pallattividuti.
6. Vennávalkudi.
7. Kuppagudi.
8. Kolandirákottai.
9. Álangudi.
10. Páchikkottai.

III. Váráppur firka.

1. Váráppur.
2. Semmattividuti.
3. Vadaválam.
4. Manaviduti.
5. Perungondánviduti.
6. Perungalur.
7. Ádanakkottai.
8. Sothuppálai.
9. Kallukkáranpatti.
10. Ganapatipuram.

IV. Malayur firka.

1. Pallavaránpattai.
2. Tirumananjeri.
3. Mullankurichi
4. Karukkákurchi East.
5. Karukkákurichi West.
6. Pannamviduti.
7. Mángóttai.
8. Malaiyur.
9. Adiránviduti.
10. Karuppattipatti.

V. Vallanád firka.

1. Sendákkudi.
2. Pálayur.
3. Kathakkurichi.
4. Vallathirákottai.
5. Vándákottai.
6. Púvarasagudi.
7. Tiruv[illegible]m.
8. Mánjamviduti.
9. Kóvilur.

VI. Karambakkudi firka.

1. Káttáthi.
2. Sengamédu.
3. Thíthánviduti.
4. Karambakkudi.
5. Piláviduti.
6. Ambukkoil.
7. Vadakkalur.
8. Raghunáthapuram.
9. Kilángádu.
10. Kírathur.

TIRUMAYAM TALÚK.

I. *Kilánilai firka.*

1. Nedungudi.
2. Nallambálsamudram.
3. Pudunilai.
4. Kummangudi.
5. Káramangalam.
6. Agavayal.
7. Válaramánikkam.
8. Kurungalur.
9. Madagam.
10. Émbal.
11. Irumbánádu.
12. Árasur.

II. *Sengirai firka.*

1. Sengirai.
2. Panangudi.
3. Thékkáttur.
4. Perungudi
5. Mirattunilai.
6. Arimalam.
7. Kílappanayur.
8. Thánjur.

III. *Tirumayam firka.*

1. Pilivalam.
2. Kottayur.
3. Tirumayam.
4. Únayur.
5. Ádanur.
6. Kónápet.
7. Pillamangalam.
8. Tholayánur.
9. Mélur,

IV. *Viráchilai firka.*

1. Viráchilai I Bit.
2. Viráchilai II Bit.
3. Kannanur.
4. Rángiam.
5. Kulipirai.
6. Mélappanayur.
7. Kólamangalam.
8. Kóttur.
9. Péraiyur.
10. Lambalakkudi.

V. *Kárayur firka.*

I. Kárayur.
2. Idayáthur.
3. Maravámadurai.
4. Oliamangalam.
5. Mélathányam.
6. Kílathányam.
7. Nerinjikkudi.
8. Nallur.
9. Arasamalai.
10. Valakkurichi.
11. Sevalur.
12. Sundaram.

VI. *Ponnamarávati firka.*

I. Mélamélanilai.
2. Múlangudi
3. Ponnamarávati East.
4. Ponnamarávati West.
5. Várpet.
6. Tirukkalambur.
7. Pálakurichi.
8. Thúthúr.
9. Álavayal.
10. Ammankurichi.

KOLATTUR TALUK.

I. Virálimalai firka.

1. Kunnathur.
2. Búdagudi.
3. Kalkudi.
4. Virálimalai.
5. Virálur.
6. Kodumbálur.
7. Therávur.
8. Mínavéli.
9. Poyyámani.
10. Kílayur.

II. Nírpalani firka.

1. Kathalur.
2. Amburáppatti.
3. Máthur.
4. Mandayur.
5. Latchumanpatti.
6. Thennáthirayanpatti.
7. Kalamavúr.
8. Nírpalani.
9. Nánguppatti.
10. Paiyur.
11. Perambur.

III. Kunnándárkoil firka.

1. Kunnándárkoil.
2. Odayálippatti.
3. Kílayur.
4. Piliyur.
5. Visalur.
6. Chettipatti.
7. Sengalur.
8. Killukóttai.
9. Themmávur.
10. Minnáthur.

IV. Kíranur firka.

1. Thennangudi.
2. Vaithur.
3. Andakkulam.
4. Killanur.
5. Vírakkudi.
6. Válamangalam.
7. Kolattur.
8. Kíranur.
9. Marudur.
10. Valiyampatti.

V. Nárttámalai firka.

1. Thodayur.
2. Vellanur.
3. Madianallur.
4. Sathiamangalam.
5. Annváasal.
6. Vilathuppatti.
7. Nárttámalai.
8. Thayinippatti.
9. Odukkur.

VI. Kudumiámalai firka.

1. Kadavanpatti.
2. Kilikkudi.
3. Parambur.
4. Kudumiámalai.
5. Mángudi.
6. Tiruvéngaivasal.
7. Perumánádu.
8. Pulvayal.

The firkas take their names from their headquarters except the Vallanàd firka the headquarters of which is Tiruvarangulam.

Demand and Collection.—

The total Land Revenue current demand for fasli 1345 (1935—36) was made up as follows.—

1.	Assessment on Ayan lands ...	7,43,046	
	Deduct Remissions ...	1,847	
			7,41,199
2.	Quit-rent on Inám Lands including the late Chinnaranmanai lands		1,05,119
3.	Cesses on Inám lands		15,683
4.	Assessment on assessed lands occupied without patta		7,084
5.	Charges for occupying Poromboke lands ...		9,628
6.	Water rate		2,336
7.	Tree revenue of all sorts		25,723
8.	Sale proceeds of Kudiswámiam rights ...		5,334
9.	Sale proceeds of house-sites in non-chetti places		7,554
10.	Other miscellaneous items, fines, forfeitures, etc.		14,371
			9,34,430
	Plus—adjustments in Dewan Peishkar's and Darbar offices which do not pass through village accounts ...		808
	Total ...		9,35,239

Out of the total demand a sum of Rs. 8,23,604 or a little less than 90 per cent was collected in the fasli.

Fasli 1339 records a collection of Rs. 14,58,002, the largest sum realised under land revenue in any single year.

As has already been stated above, though remission is not ordinarily allowed, it is granted whenever there is a *total* failure of crops over *widespread and well-defined* areas. Occasions when such remission has been granted have been briefly mentioned in Chapter I (pages 21 and 22).

Conclusion.—A little more than 100 years ago the *ayan* lands in the State were 17,958 *velis* in area out of a total area of 54,960 *velis* of cultivated land. The Land Revenue amounted to 1¾ lakhs. Just before the *amáni* settlement the Land Revenue was a little less than 3 lakhs, while the Jàgírs and

Devastànam lands yielded an income of about 5¼ lakhs. After the *amáni* settlement, consequent on the resumption of the Western Palace and Chinnaranmanai Jàgírs, the enfranchisement of service inàms, and the amalgamation of Devastànam lands with *ayan*, the revenue rose to about 8 lakhs. Since the resettlement, as a result of the *natham* survey and the assignment of unoccupied lands, the revenue has risen to between 9½ and 10 lakhs. This steady increase has enabled the Darbar to accumulate a substantial reserve on which they have drawn heavily in seasons of severe drought or floods.

CHAPTER XIV.

SALT, ABKARI AND MISCELLANEOUS REVENUE.

Historical.—There is evidence in the inscriptions that, in addition to the land-tax, a large number of imposts were levied in early times. They were variously called *kadamai*, *vari* and *peru*, and were levied on trades, occupations, and commodities; but they are now mostly unidentifiable. A Tiruvarangulam inscription dated 1261 A. D. mentions stations for the collection of duty on salt, dholl, betel, etc., and another in the same place dated 1300 A. D. refers to a tax of 3 *kásus* on smithies. Another at Kottaiyúr of the 13th year of an unidentified Kulasékhara Pandya refers to a tax of half a *paḻan kásu* on looms. An inscription on the Mélamalai hill at Nàrttàmalai, dated the 12th year of Màravarman Sundara Pàndya I (1228 A. D.), directs the collection of a wedding tax of 200 *kásus* from the bride and 180 *kásus* from the bridegroom to meet the cost of temple repairs—voluntary subscriptions for such purposes are still made on the occasion of marriages.

The names of imposts found in the State inscriptions bear out the following observations in Mr. K. V. Subrahmanya Aiyar's "Historical Sketches of Ancient Deccan"——"Looking at the list of taxes, it is clear that all professional men............had, in ancient times, to pay a small fee or tax to the State. These taxes resemble to a great extent the profession and trade tax of modern municipalities, but were very minutely and carefully ascertained..................But there is no doubt that these items should have made a large sum to the State." The very names of the taxes indicate in some cases the amount to be paid.

Mr. W. H. Bayley (a former Resident) in his report to the Madras Government shows that about the year 1841, the revenue, in addition to the land-tax, was derived from salt, abkari, sayer, mohturpha,* iron-smelting works and forests and also from fines, nazzars, and confiscations.

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* For explanation please see next page.

By 1875 sayer had ceased to be a source of income, mohturpha had come into greater prominence, and registration fees had been introduced. In 1879, Court fees formed a fresh source of income and the revenue from Post-offices increased with the opening of Sub-offices in the Taluk headquarters.

Revenue is now derived not only from salt and abkari, registration and forests as of old, but also from market and cart-stand fees (first shown separately in the Budget in 1895-6); tolls (town-tolls introduced in 1889-90 and frontier tolls in 1901); stamps (introduced in 1908); rents; educational and medical fees; income from the Press, Jail industries, the State Farm, and the Workshop; and *undial* (votive offerings in kind or in cash or in the shape of ornaments) and other collections from Devastanams.

Sayer.—Sayer is the Muhammadan term for the old Hindu *vaḷiáyam* (வழி ஆயம்) or land customs collected at the frontier on goods of every description ranging from articles of luxury to necessaries such as paddy, gram, and salt. It was collected in cash or kind at customs houses called *chowkies*. It was finally abolished in about 1844.

Mohturpha (Urdu—*Mutarifa*—a tax corresponding to our modern house or profession taxes) was introduced in 1861 by Sirkíl Annàswàmi Aiyar. There is a tradition that the Paraiya and other poorer classes of the town resorted to passive resistance, deserted their homes and camped round the Sirkíl's house. Mohturpha was levied not only on houses but on shops, looms, and oil presses at the rates shown below:—

		Rs.	A.	P.
1. Houses	Terraced	1	0	0
	Tiled	0	8	0
	Thatched	0	4	0
	Huts	0	0	6
2. Shops	Draper's	3	0	0
	Grocer's	2	0	0
	Butcher's	2	0	0
	Betel and flower seller's	0	8	0

			Rs.	A.	P.
3. Looms	....	Silk	1	0	0
		Cotton, blanket, and mat.	0	12	0
4. Oil Presses		....	2	0	0

Houses and looms in *sarvamányam* villages were exempted from mohturpha. In 1887, Sir Sashia Sàstriar exempted the houses of the poorer classes from this tax as some compensation for the increase in the price of salt due to the suppression of the manufacture of earth-salt. House tax is now one of the items of revenue enjoyed by Unions and Panchayats and by the Town Municipality.

Salt.—

Earth-salt: its manufacture.—The State has no sea-board; but saline deposits occur in various parts of the State, from which a quantity of earth-salt was manufactured from immemorial times for local consumption.

The process of manufacture was simple. The salt-earth was scraped up and lixiviated in earthernware pots provided with a vent at the bottom plugged with rags, through which the solution filtered into pans prepared on the ground. The solution evaporated in these pans, and the crystals that formed were subsequently scraped up with iron ladles and stored in pits. The professional manufacturers belonged to the Uppiliyan caste.

The salt so manufactured was whiter than sea-salt, and not unwholesome. The Chemical examiner to the Madras Government reported in 1875 that it contained 97·6 *per cent* of sodium chloride. It was chiefly consumed by the poorest classes who could not afford the more costly sea-salt.

The State had always claimed a monopoly in the manufacture and sale of salt, and exercised it in former times by leasing out its rights, along with those of sayer, for a term of years—for example in 1841 for 4 years. But later on, when relations with the Madras Government necessitated a closer watch over the business, in order to prevent smuggling and other illicit practices,

the State manufactured salt departmentally. Advances were given to the Uppiliyans, from whom the State took the salt over paying a *kudivâram* share calculated at eight annas per *kalam*, and later at 12 annas and 10 annas for the first and second qualities respectively. Wholesale disposal was forbidden, to prevent 'corners', and the State sold the salt direct by retail at 17 *mundies* or depôts situated all over the country. In about 1881-2, the prices were Re. 1 per *kalam* at the capital, and about 12 annas elsewhere.

The monopoly that the State enjoyed was at best partial. Private manufacture was no doubt forbidden but there was no preventive staff except the Tahsildar and his deputy. British salt was imported and sold in large quantities. Again, owing to the incompetence of the salt makers enough salt was not manufactured to meet the local demand, and the poor often had to buy British salt. The total output for 1875, for instance, was 15,000 *kalams* or about 13lb. per head of population whereas a conservative estimate of the demand per head would be 20lb. The result was that the State monopoly was not always very profitable.

Suppression of the manufacture of earth-salt.—The settled policy of the British Government from the early days of the East India Company was to secure control of salt manufacture throughout India; and this led gradually but inevitably to the total suppression of manufacture in the State.

Even when the Carnatic was under the rule of the Nawab, the British had bargained for a salt monopoly with him. In 1815 they entered into a convention with the French in India to buy their output of salt for 4 lakhs of sicca Rupees annually, and three years later covenanted for the entire suppression of the manufacture in the French settlements in consideration of an annual subsidy. It was only natural that at about the same time similar overtures should be made to the dependent Ruler of Pudukkóttai.

The Tanjore Collector complained in 1813 that State salt was being smuggled into his district, and suggested the suppression of salt manufacture in the State. But there was not much ground for this complaint. To smuggle salt into Tanjore District evading the vigilant chowkidars of the Madras Government and the State was not easy. Moreover, as Mr. Blackburne pointed out at the time, "it was notorious that in the Southern part of the province of Tanjore the people made the earth-salt for their own consumption........at the same expense which it cost the inhabitants of Pudukkóttai." He also observed that the suppression of the manufacture would be injurious to the State on economic, political and moral grounds; that it would be an economic calamity to the poor ryots who already suffered from 'the poverty of the soil and the frequent failure of scanty crops,' if they were prohibited from 'picking up the salt which Providence had scattered over their fields;' that such a course would be politically inexpedient as it would undermine the faith in the British Government 'which had never yet been considered by the Ràjàh Bahadur and his subjects in any other light than that of a beneficent and guardian angel;' that on moral grounds the measure was open to objection; that entire suppression would be by no means easy since thereby a premium would be put upon evasion, fraud, and perjury; and that above all the game was not worth the candle, because only a very limited quantity of salt was made in the State, hardly sufficient even for the poor.

For the time being Mr. Blackburne's representations carried weight, and the question was shelved. Steps were taken to put down smuggling and illicit manufacture. The State took the manufacture into its own hands, and restricted it to a few factories in the interior.

But the question cropped up again and again throughout the last century, repeatedly raised by the suspicions of the British Salt department, and as often set at rest by successive Political Agents who knew the facts. On one occasion, when

re-criminations had become unpleasantly acute, Mr. Pennington who was Political Agent at the time wrote to say:—

'Even though as much salt were made clandestinely as by Government, I cannot for my part see on what grounds the British Government could claim to interfere with the action of the Pudukkóttai Government in regard to the manufacture of an article like salt, even if that Government should resolve to encourage the private manufacture as much as possible. It is certain that no better means could be adopted for developing the agricultural resources of the country.'

Mr. Pennington considered the salt monopoly of the State a worse evil than the poll tax, and advised that it should be abolished and manufacture freely permitted and that the consequent loss of revenue be made good by a slight enhancement of the mohturpha levied on the houses of the rich. Though the Madras Government did not view these proposals with favour they decided for the time being not to interfere with the production of salt in the State 'as exportation to British territory was not suspected to prevail.'

But the suspicion rose again in 1882, when the State had just put its salt business in order, and was rejoicing in a steady increase of revenue. And so to meet the wishes of the Madras Government, the existing penal rules were codified and embodied in a Regulation (I of 1882) which prescribed stringent penalties for smuggling and illicit manufacture.

The beginning of the end of the controversy came in 1886. The Madras Board of Revenue put forward the proposal that as an alternative to total suppression the State might bind itself to prohibit the manufacture of earth-salt within five miles of the frontier, and to equalise the price of the local salt with British rates. The first condition was impossible and the second ruinous. Since all the salt-earth of the State lay near the frontier, compliance with the first stipulation would have been tantamount to an entire suppression of the manufacture. Equalisation of the prices was bound to drive the earth-salt from the market.

In order to remove a source of frequent friction between the State and the British Salt department the State agreed to total suppression.

The Salt convention of 1887.—Under the Salt convention which the Madras Government concluded with the State in 1887 a non-recurring sum of Rs. 5,000 was paid towards the cost of dismantling the factories and to help the workers thrown-out of employment. An annual compensation of Rs. 38,000 was granted to the State, of which Rs. 15,000 was for loss of Salt revenue, Rs. 13,000, compensation for the partial abolition of Mohturpha, and Rs. 10,000 for the cost of maintaining a Salt preventive force.

A Regulation called the Earth-salt Suppression Regulation (I of 1887) was passed, and a preventive staff was established in 1888. Some correspondence took place regarding the supervision of the Force by an officer of the British Salt department, but this proposal was dropped as incompatible with the sovereignty of the State.

The immediate effect of these measures was thus described by Sir Sashia Sàstriar:—

*"That the measure created great unpopularity goes without saying. Unfortunately the unpopularity was enhanced by the simultaneous raising † of the excise duty on salt in British India........The stringency with which the law has to be enforced by the Preventive Police against, as happens, the weakest and poorest descriptions of the people and the sudden and the frequent enhancement of the selling price at the fairs by the tradesmen engaged in the traffic are still matters of irritation and bitter complaint."

The convention did not put an end at once to friction between the State and the Madras Government. Immediately after the passing of the Regulation, 'Salt' offences increased,

* Quoted from Mr. B. V. Kamesvara Aiyar's "Life of Sir Sashia Sastriar."
† It was at this time raised by 25 *per cent.*

though after some years they declined. The Madras Government attributed this increase to laxity of supervision, taking their stand mainly on the statistics of the British factories in respect of quantities declared for sale in Pudukkóttai.

But the complaints of the Madras Government were groundless. The factory figures were misleading. Salt dribbled into the State through petty traders who, when they purchased salt at the factories, did not declare it for export to Pudukkóttai. In regard to the prevention and detection of Salt offences, the State had always been anxious to fulfil its obligation. It gauged the efficiency of its Salt Force by the number of offences brought to light, so that the officers tended if anything to become overzealous. Kolattúr and Karambakkudi where salt crime was rife were placed under a special officer. Salt registration stations were opened at the close of 1900 on 12 frontier roads and maintained for six months, and the statistical information so collected proved that the annual consumption was not less than a lakh of maunds or more than twice the 'declared' figures. In 1903-4 the Police were instructed that their responsibility in respect of Salt crime was as great as if there had been no separate department to deal with it. Owing to these causes and also to a reduction of the Salt duty in 1903, the number of offences in the State fell considerably, but the Madras Government still opined that there was something radically wrong with the detective agency, that offences were not reported, and that the matter required thorough investigation. Such an investigation was accordingly made in 1904-5 which, it would appear, finally set at rest all doubts and fears. In recent years there have been hardly any offences under the Regulation.

An unsuccessful attempt was made in 1901-3 to get the convention of 1887 revised on the ground that the Madras Government realised by way of duty levied on the salt consumed in the State a net income of Rs. 2,00,000, far in excess of the sum of Rs. 38,000 paid to the State under the convention. The same subject is at present under correspondence.

Sea-salt.—The State now depends entirely on British sea-salt. The chief sources of supply are the factories at Adiràmpatnam, Kattumàvadi, Vattanam, Thíthàndathàniam and Negapatam of which the most important is Kattumàvadi.

In 1917–18, when the duty on salt was raised the quantity sold to the State contractor in the Kattumàvadi factory at the favourable rates offered by the Madras Board of Revenue was much below the demand, but salt bought at auction at the factories by petty traders was brought into the State and found a ready sale in the market. Salt then sold at 11·32 Madras seers per rupee in the State markets. Later the State contractors were able to get salt from the factory at Kattumàvadi at a concession rate of 22·57 Madras seers per rupee. At present the price of salt ranges from 14·51 to 18·42 seers per rupee.

Between faslis 1340 and 1345 there were only two prosecution for offences against the Salt Regulation both of which resulted in conviction.

Abkari.—

Country Liquor.—The manufacture and sale of arrack and toddy have always been a State monopoly. In modern times the monopoly extended to the sale of foreign liquor, opium, ganja and *sákna* (a preparation of meat sold at taverns). *Sákna* is not leased out at present.

In 1839–40 the arrack revenue amounted to only Rs. 6,964 together with the receipts from forests and iron ore. In 1874–5, it was Rs. 9,719, or 'less than half an anna per head of population.' In 1881–2 it stood at Rs. 12,664. The fault lay in the renting system under which the revenue was realised. The right of manufacturing and selling arrack in defined farms was leased out to professional contractors for a number of years. Since the officer entrusted with the duty of leasing out the farms drew a salary of only Rs. 15 or 20 per mensem and was practically left to his own devices, the rentals were not unnaturally low. About 1881–2, the revenue began to rise owing to competition at the auctions. In 1884–5 the farms were separately

leased for a period of six years (1884–1890) on progressive rents beginning with Rs. 20,000 per annum and reaching within the first three years a maximum of Rs. 25,000.

This system, though an improvement upon the former system or lack of system, provided no means of ascertaining the actual output and the possibilities of a further expansion of revenue. Under this arrangement there were 186 stills, and 282 arrack shops in the State in 1890.

At the instance of the Madras Government, Regulation No. I of 1890 was passed and came into force in July 1890. It has since been repealed by Regulation No. X of 1931. All private stills were abolished, and the State arranged for the manufacture of country liquor at the capital at a central distillery of its own, from which liquor was issued on payment of costly price and a still-head duty. Licenses were granted separate for the right of vend in respect of 33 farms or areas into which the State was divided for the purpose.

The fluctuations in the still-head duty which was at first fixed at Rs. 1—8—0, are shown below:—

	Rs. A. P.		
1891–2	1–12-0	per gallon	30° U.P.
1893–4	2– 4–0	,,	,,
1900–01	2– 8–0	,,	,, (20° at Rs. 3 & 60° at Rs. 2–0–0).
1907–08	3– 8–0	,,	,, (20° at Rs. 4 & 60° at Rs. 2–0–0).
1909–10	3–15-0	,,	,, (20° at Rs. 4–8–0 & 60° at Rs. 2–4–0)
1911–12	4– 6–0	,,	,,
1920–21	5– 8–0	,	35° U.P.
1925–26	5– 8–0	,,	38° U.P.
1935–36	4 - 4–0	,,	35° U.P.

With effect from July 1, 1935, the duty on liquor was reduced from Rs. 5—8—0 to Rs. 4—4—0 a gallon in conformity with the reduction made by the Madras Government from April 1, 1935.

Arrack is now manufactured from palmyra jaggery and the bark of *Acacia leucophlea*. The output in 1935–36 was 6,177 gallons, 1,779 gallons issued direct to shop-keepers and 4,398

gallons issued to the depôts. The contractor's cost of manufacture in the State distillery was Rs. 1—4—0 per gallon against Rs. 1—5—6 in the previous year. The price of liquor sold in the distillery and the depôts was reduced from Rs. 7—4—0 per gallon in 1934—35 to Rs. 5—13—0 in 1935-36; but there was no increase in consumption. October, when the Deepàvali festival is celebrated, appears to be the month of heaviest consumption; and in October 1935, 825 gallons were issued.

In 1935-36, 45 shops were notified for sale, of which 44 were sold. Each shop served on an average 10 villages, and the retail sale price of liquor ranged from Rs. 10—8—0 to Rs. 13—8—0 per gallon. The incidence of taxation per head was slightly less than 3 annas.

The following table shows the revenue from arrack during the five faslis (1341 to 1345).

Fasli.	Number of gallons issued.	Issue price per gallon.	Number of arrack shops.	Revenue demand.		
				License fees.	Sale proceeds of liquor.	Total.
		Rs. A. P.		Rs.	Rs.	Rs.
1341	8,540	7 3 0	40	48,036	61,378	1,09,414
1342	6,966	7 3 0	43	44,401	50,067	94,468
1343	7,045	7 3 0	42	36,696	50,639	87,335
1344	{4,350 {1,718	7 4 0 7 0 0	39	30,531	43,564	74,095
1345	6,176	5 13 0	44	35,049	35,895	70,944

Toddy.—This is extracted from the cocoanut, the palmyra and the date-palm. The shànars are the professional tappers. Date toddy is considered the most intoxicating. Consumption is heaviest during the transplantation and harvest seasons.

Toddy is generally preferred to arrack by the labouring classes as less ardent, more wholesome, and cheaper.

Toddy revenue showed no tendency to rise till 1890 owing to an arrangement under which its sale was prohibited in areas where it would compete with arrack. In 1881-4, for instance, the revenue was only Rs. 2,324 made up of Rs. 528 from 4,227

palmyra trees and Rs. 1,796 from 1,064 cocoanut trees. When these restrictions were removed in 1890, and liquor and toddy were allowed to compete side by side, the revenue went up with a bound, and more than doubled itself in the very first year.

In 1891–2 the separate tree-tax system was introduced to a limited extent superseding the old vend area system. The farm was still retained as a unit of assessment, but the right of tapping was limited to the number of trees for which the contractor paid kist at Rs. 3 per cocoanut tree, and Re. 1 per palmyra tree. Revenue was also raised from this year by licensing the toddy shops. In the course of the next two years the vend area system was totally abolished. Henceforth each shop was sold separately. Toddy wherever drawn might be transported to any shop for sale. Under these arrangements the revenue rose from Rs. 7,000 in 1890 to Rs. 22,184 in 1893–4, and twelve years later had doubled. By 1907–8, it stood at Rs. 50,000. At the suggestion of the Madras Government the tax on palmyra trees was raised to Rs. 2.

In 1911, the toddy year which had been identical with the official or fasli year was changed so as to run from October 1, to September 30. Tree tapping licenses were issued half-yearly for cocoanut trees and annually for palmyra and date trees. The half yearly tax on cocoanut trees was raised from Rs. 2 in 1911–12, to Rs. 2–8–0 in 1914–15, to Rs. 3—12—0 in 1915–16, then to Rs. 4—8—0 in 1918–19, and again to Rs. 5—10—0 in 1927–28. The annual tax on palmyra and date trees was raised to Rs. 2—8—0 in 1915–16, to Rs. 3—0—0 in 1918–19 and to Rs. 3—12—0 in 1927–28.

8,615 cocoanut tress and 208 palmyra trees were licensed in the year 1935–36, against 13,672 cocoanut, 231 palmyra and 10 date trees in the previous year. During 1935–36, 590 cocoanut trees were tapped in the State for British shops, and 2,765 trees were tapped in the adjoining Madras districts for shops in the State. The revenue both under 'Tree tax' and 'Shop rentals' fell heavily in fasli 1345 (see below). The causes of this decrease

are doubtful. Naturally "the general depression" is mentioned as one,—while the severe drought of the hot weather of 1935 is said to have reduced the yield of the palms. There is no reason to suspect any increase in illicit practices. Each toddy shop serves on an average 5 villages, and the incidence of taxation per head of the population is about 6 annas.

The following table shows the revenue from the sale of toddy during the five faslis (1341—45):—

Fasli.	Number of toddy shops	Toddy Revenue Demand.		
		Shop rentals.	Tree tax.	Total.
		Rs.	Rs.	Rs.
1341	105	1,02,119	80,236	1,82,355
1342	108	1,10,727	83,951	1,94,678
1343	107	1,24,642	83,473	2,08,115
1344	108	1,27,731	80,781	2,08,502
1345	95	95,275	56,545	1,50,820

Jaggery:—In 1905, in order to encourage the manufacture of jaggery from sweet toddy, the State offered advances in money to tappers and special concessions such as free licenses for tapping juice and for the collection of jungle fuel. Some shànars were sent to Tinnevelly to learn the industry. In 1909–10, a special inspector was appointed to stimulate the industry. In 1933–34, however, only 85 palmyra trees were tapped for jaggery; and it was evident that the efforts of the Darbar had been ineffective. The encouragement of the manufacture of jaggery is now included in the programme of village improvement work. An extensive survey was made in 1936–37 of the possibilities of making palmyra jaggery. Efforts were made to induce the Shànars in Mirattunilai, Perambur, Konnaiyur, and Péraiyur to take to the industry. The results in Mirattunilai and Perambur are encouraging. In order to induce people to take up this occupation, the Darbar now permit the free collection of small fuel in Government forests for the purpose of boiling sweet toddy.

The Darbar have sanctioned the construction of a Sindwahe furnace in a selected village. They have also sent a pupil to the Agricultural College, Coimbatore, to be trained in jaggery-making.

Foreign Liquor and Beer.—No restriction is imposed on the importation of foreign spirits. No permit was necessary for its sale till 1881–82, when annual licences were introduced. Since 1892–93, the Darbar have been selling the right to sell foreign liquor in open auction annually. The foreign liquor shops at Ponnamaràvati and Pudukkóttai together fetched Rs. 4,392 in 1934–35. In 1935–36 a shop was opened at Panayappatti, and the three shops together fetched a rental of Rs. 4,872. In 1935–36, license was issued on payment of a fixed fee of Rs. 300 to a Hotel at the capital for the supply of liquor to customers.

Intoxicating drugs.—The cultivation of Poppy and the manufacture of opium are prohibited in the State. The State buys all the opium that it needs from the Madras Government who since April 1, 1929 have been supplying it free of duty. The Darbar supply the shop-keepers with opium at a price not less than the issue price prevailing in the adjoining Madras districts.

Similarly the cultivation of the hemp plant is prohibited in the State. Formerly the Darbar purchased and stocked *ganja* and sold it to the shops on collection of the prescribed issue price. This system was discontinued in fasli 1344 and the following procedure is now followed. A licensed vendor desiring to procure *ganja* is required to pay to the Abkari Department not less than one-fourth of the duty on the quantity to be imported, to obtain a certificate of import and to make his own arrangements to buy the drug at the store house of the Madras Government on behalf of the Darbar. The *ganja* so imported is kept in the Darbar store house in charge of the Excise Officer and issued to the vendor on collection of the balance of duty.

The rental secured in 1935–36 from opium and *ganja* shops was Rs. 5,028 against Rs. 4,876 in 1934–35. 71¼ seers of opium against 61¼ seers in the previous year, and 93 seers of *ganja* against 81 seers in the previous year, were issued to the shops for sale.

The following figures show the variations during the five faslis—1341-1345 in the revenue from intoxicating drugs, country beer and foreign liquors :—

Fasli.	Demand.
	Rs.
1341	27,216
1342	29,070
1343	22,273
1344	21,570
1345	23,956

Statistics.—The following is the Excise Demand, Collection and Balance statement for fasli 1345 :—

Items.	Demand.			Collection.			Balance.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Liquor—Cost price ...	9,649	3	6	9,649	3	6			
Duty ...	26,245	14	0	26.255	14	0			
Shop license Fees :—									
Current ...	34,608	0	0	34,608	0	0			
Arrears ...	440	14	0	440	14	0			
Toddy—Shop license fees:—									
Current ...	91,083	0	0	91,497	5	11*	1,329	15	6
Arrears ...	3,191	14	0	2,712	14	4	478	15	8
Tree tax :—									
Current ...	54,744	9	0	57,730	14	6	122	4	0
Arrears ...	1,800	0	0	1,306	7	6	494	5	6
Opium and ganja—									
Shop license fees ..	5,028	0	0	5,028	0	0			
Sale of ganja ...	2,571	4	0	2,571	4	0			
Sale of opium ...	5,755	12	0	5,755	12	0			
Foreign liquor... ...	4,872	0	0	4,872	0	0			
Country Beer	3,600	0	0	3,780	0	0			
Miscellaneous	1,949	2	3	1,949	2	3			
Total ...	2,45,719	8	9	2,48,147	13	0†	2,425	8	8

* These figures include the excess collection of the previous fasli.

† This figure includes amounts written off under different items; the actual collection for the fasli was only Rs. 2,48,166-15-4.

The total cost of the department in fasli 1344 including that of the Salt Preventive Force was Rs. 26,093. In fasli 1346, it fell to Rs. 10,639 owing to the amalgamation of this department with the Revenue Department.

Offences against Abkari Regulations.–The number of offences detected in 1935–36 was 70 affecting 82 persons. Of these 12 were committed to magistrates, 55 were compounded for Rs. 622; and 3 were pending at the close of the year. The commonest offences were illicit transport or unlicensed sales of liquor and illicit manufacture of toddy. Such offences as illicit distillation, using false measures, and adulteration are very rare.

Matches.—The Pudukkóttai Matches (Excise Duty) Regulation III of 1934 became law in the State on August 1, 1934. In fasli 1344, there was only one match factory run by Mr. Asaph on a small scale entirely by manual labour. The value of banderols issued to the factory in 1934–35 was Rs. 1,022 and the duty levied, Rs. 982. The Pudukkóttai Match Factory which took over Mr. Asaph's business was started in May 1936 at Tirugókarnam. The face value of the banderols issued to the factory during fasli 1346 (1936–37) was Rs. 4,270, and the gross duty levied, Rs. 3,948. The net amount realised by the sale of banderols was Rs. 4,043 and the net duty levied, Rs. 3,743. In addition to this, a sum of Rs. 41,808 was received in the fasli from the Government of India pool.

Administration.—Under the early system of periodical leases, the Abkari staff was limited to a low paid amin (on Rs. 8 in 1881–82) with a few menials to collect Sirkar dues. In connection with the State manufacture and sale of salt however, a large establishment was employed, consisting of watchmen in charge of the *mundis* under the supervision of Inspectors and Revenue officials. In 1881–82, the entire salt establishment cost only Rs. 201.

The suppression of manufacture necessitated the creation of a Salt Preventive Force. The Abkari Department under the Deputy Peishkar was amalgamated with the Salt Department in 1890. The combined department was under a Superintendent

assisted by three Inspectors and six sub-inspectors. Between 1897 and 1908 the Forest Department formed part of the Salt and Abkari Department. It next worked as a separate department till 1918 when it was again amalgamated with the Salt and Abkari. The department of Salt, Abkari and Forests was under a Superintendent assisted by six Circle Inspectors till February 1, 1936, when the Darbar ordered the amalgamation of this department with the Land Revenue Department under the Dewan Peishkar. The Dewan Peishkar and the three Tahsildars are now performing the duties of the Superintendent of Salt, Abkari and Forests, subject to such instructions as the Darbar may issue from time to time in regard to the powers to be delegated by the Dewan Peishkar to the Tahsildars. The executive duties previously performed by the Circle Inspectors of Salt, Abkari and Forests are now performed by the Revenue Inspectors. To cope with this work an additional Revenue Inspector has been appointed for each taluk. The liquor depóts at Viràlimalai and Ponnamaràvati have been transferred to the control of the respective Sub-Registrars who are responsible so far as this work is concerned, to the Tahsildars and the Dewan Peishkar. The Town Distillery is under the immediate control of the Personal Assistant to the Dewan Peishkar.

Stamps.—The question of introducing stamps for documents filed in judicial proceedings was mooted in 1857 but held in abeyance for the time being under the advice of the Madras Government. A Stamp Regulation (No. II of 1905) was passed in 1905, but stamps were not actually issued till 1908. The Registrar of Assurances was ex-officio Superintendent of stamps, but since 1920, the Superintendent of Printing and Stationery has been in charge of Stamps. In 1935–36, 4,72,708 stamps valued at Rs. 4,50,719 were manufactured; and 5,40,213 stamps valued at Rs. 4,13,966 were issued from the Stamp central depót to the Huzur treasury. The total income from the sale of stamps of all descriptions was Rs 3,96,487 in fasli 1345. The expenditure under 'Stamps' in the same fasli was Rs. 8,545.

Income-tax.—The State levies no income-tax.

Other miscellaneous items.—Miscellaneous items of revenue, for example, Pounds, Tolls, Market fees, Cartstand fees, and license fees for motor cars, etc., together yield an annual revenue exceeding two lakhs of rupees.

CHAPTER XV.

LEGISLATION.

History of Legislation.—From time immemorial proclamations have been issued by the Rulers and held to have the force of law though no attempt was made to collate and codify them. From 1850 onwards as a result of the influence of successive Residents and Political Agents, British Indian Laws, were gradually introduced into the State, and the rulings of British Indian High Courts began to be followed. The Civil Procedure Code was introduced in 1859, and the Indian Penal Code and Criminal Procedure Code in 1868. Similarly the Revenue and other executive officers adopted and enforced as they saw fit the departmental codes and rulings of the Madras Government. But this practice was not formally authorised. In 1876 for the first time two Regulations, now obsolete, relating to Registration and the formation of a Police Force were enacted by the Raja. In the same year the Appeal Judge was entrusted with the task of drawing up a code of laws for the administration of justice. But nothing was done till 1882 when an omnibus Regulation was passed adopting, among other laws, the Civil Procedure Code, the Criminal Procedure Code, the Indian Penal Code, the Indian Evidence Act, and the Limitation Act of British India. These were declared to be applicable, ***mutatis mutandis***, with due regard to local customs, and circumstances, as well as to the constitution of the State, and subject also to such reservations and rules as might from time to time be issued by the Huzur Adawlut Court and published in the Gazette. The Regulation laid down that the rulings of the local Huzur Court should be binding on the lower courts, and all courts in the State should ordinarily be guided by the decisions of the High Courts in British India.

The original procedure in framing a Regulation was for the Dewan to draft a bill and circulate it to the Karbar, the Civil Judge, the Appeal Judge, and the Heads of Departments concerned for opinion before it received the final sanction of His Highness. In 1904 a Law Committee was appointed to draft Regulations, and advise the Darbar on legislative matters. An Advisory Council was created in 1915 as one of the Silver Jubilee "boons" and was consulted about legislation. It consisted of the members of the State Council, the State Vakil, two members elected by the Representative Assembly and two more nominated by His Highness. Its legislative deliberations were purely advisory.

The Representative Assembly.—The experiment of associating the people in some measure with the administration originated in the year 1902 when for the first time an Assembly of Nominated Representatives was convened. It was composed of 30 members representing various interests and selected from among persons nominated by the Heads of Departments and certain public associations. The results of the administration of the State in the preceding year and a programme for the future were placed before the Assembly, and members had the right to make interpellations and suggestions on matters touching the administration.

The term of membership was at first annual but was after a time extended to three years. An elective element was introduced in 1907; the Assembly that met on July 26th of that year was renamed the Representative Assembly and included 18 elected members out of a total of 30. In the next year members were granted the privilege of proposing matters of public importance for discussion.

The number of elected members was 13 in 1913, but it was raised to 25 in 1916 as a "boon" granted by His late Highness soon after his wedding.

The Assembly served a useful purpose in bringing before the Darbar the needs and requirements of the various parts of the State which the members represented. Apart from the annual meetings, the members were occasionally consulted on questions about which the Darbar desired to ascertain public opinion; sometimes by correspondence, and sometimes by holding a special session.

His Highness the Raja was present at the 1914 and 1915 sittings of the Assembly and watched the proceedings with interest.

The Legislative Council.—In the year 1924, the Representative Assembly and the Legislative Advisory Council were replaced by a single institution designated, "The Pudukkóttai Legislative Council." The Representative Assembly was created in order to ascertain from the representatives of the people what the people wanted the Government to do for them; the Legislative Advisory Council was constituted for the purpose of giving the people a voice in legislation; and the Legislative Council was created in order to associate the people of the State with administration. It was constituted on a statutory basis. Rajkumar Vijaya Raghunatha Dorai Raja, the Regent, promulgated the Pudukkóttai Legislative Council Regulation No. IV of 1924.

The Council was inaugurated on Monday, September 29, 1924, by the Regent. Mr. C. W. E. Cotton, I. C. S., Agent to the Governor-General, Madras States, was present at the inauguration ceremony.

The Legislative Council consists of fifty members of whom thirty-five are elected and fifteen nominated by Government. The nominated members include the officials in charge of the several departments. Since the year 1927, the nominated members have included a lady and an Adi-dravida. The Dewan was formerly ex-officio President of the Council. When the administration of the State was vested in an Administrator, the

Administrator became the President. In his absence, the Assistant Administrator presides over the Council, and in the absence of both the Administrator and the Assistant Administrator, the Deputy President presides. The office of Deputy President of the Council was held by a retired official till 1933, when it was for the first time vested in a non-official elected member.

The Legislative Council has the power of making laws and Regulations. When any Bill has been passed by the Council, it has to be submitted through the Dewan to His Highness the Raja for his assent; and "no such Bill shall become law until His Highness the Raja shall have declared his assent thereto." During the minority of His Highness the Raja, bills are submitted to the Administrator for his assent. But nothing contained in the Regulation (No. IV of 1924) "shall be deemed to have affected the Prerogative right of His Highness the Raja to make and pass Regulations and Proclamations independent of the Council," which right is by the Regulation "expressly declared to be and to have been always possessed and retained by His Highness the Raja." During the minority this power is exercised by the Administrator. Under Section 11 of the Regulation, it is not lawful for the Council to consider or enact any measure relating to or affecting:—

(*a*) the ruling family of Pudukkóttai;

(*b*) the relations of His Highness the Raja with the Paramount Power or with foreign Princes or States;

(*c*) matters governed by treaties, conventions or agreements now in force or hereafter to be made by His Highness the Raja with the Paramount Power;

(*d*) extradition of criminals;

(*e*) European vagrants;

(*f*) European British subjects;

(*g*) Imperial Post Office and Telegraphs and Railways;

(*h*) wireless and aviation; or

(*i*) the provisions of this Regulation.

The annual Budget of the State is laid before the Council in the form of a statement. The Government submit proposals for appropriation of revenue to the vote of the Council in the form of Demands for Grants. The council discusses the Budget generally in what is known as the General Discussion of the Budget, and particularly in regard to specific items by raising cut motions on Demands for Grants. Under Section 16(4) of the Regulation proposals for the appropriation of revenues for the following matters are not subject to the vote of the Council:—

i. expenditure relating to any matter removed from the cognizance of the Council by proviso to Section 11 of the Regulation (enumerated above);

ii. the military forces;

iii. expenditure which is obligatory under any law;

iv. pensions and gratuities granted by Government;

v. salaries and allowances of officers of and above the rank of Heads of Departments;

vi. interest on loans and sinking fund charges; and

vii. Palace expenditure and expenditure classified by Government as 'Political.'

Since 1930 a Standing Finance Committee is being constituted annually for the purpose of advising the Government on schemes of new expenditure and appropriation of revenues. The Finance Committee consists of seven members,—the President, three elected by the non-official members of the Council from among themselves and three nominated by the Government.

Suggestions on matters of general public interest are made by the members of the Council in the form of Resolutions, which only have the effect of recommendations.

Every Council ordinarily continues for three years from the date of its first meeting; but Government have the power in special circumstances to dissolve a Council before the expiry of

three years or to extend the period. When a Council is dissolved, the Dewan (now the Administrator) appoints a date, not more than six months from the date of its dissolution, for the meeting of the new Council.

Four Councils have been constituted so far. The elections for the fifth Council were held in September 1936.

The following is a statement of the business transacted in the four Councils between 1925 and 1936.

	Number of questions answered.	Number of resolutions discussed.	Number of resolutions carried.	Number of resolutions withdrawn or rejected.	Number of Legislative measures considered.
First Council.					
1334, 1335, 1336	1.650	82	31	51	23
Second Council.					
1337, 1338, 1339	1,126	58	6	52	30
Third Council.					
1340, 1341, 1342	986	232	24	208	17
Fourth Council.					
1343, 1344, 1345	1,491	109	32	77	26

The Constituencies of the Legislative Council.—Section 4 (4) of the Legislative Council Regulation No. IV of 1924 runs:—"The Pudukkóttai Legislative Council shall consist of not less than forty and not more than sixty members of whom seventy per cent shall be elected and the rest shall be nominated; (As already stated, the Council, now consists of thirty-five elected members and fifteen nominated members.)

"Provided that Government may for the purposes of any Bill introduced or proposed to be introduced in the Council, nominate not more than two members having special knowledge

or experience of the subject matter of the Bill, and those persons shall, in relation to the Bill, have, for the period for which they are nominated, all the rights of members of the Council and shall be in addition to the numbers above referred to."

The elected members are elected by the constituencies specified in the subjoined table.

	Name of constituency.	Class of constituency.	Number of members.
1.	Pudukkóttai Town	General	4
2.	Pudukkóttai Division	"	1
3.	Vallanád Division	"	2
4.	Álangudi Division	"	2
5.	Váráppúr Division	"	2
6.	Karambakkudi Division	"	2
7.	Ponnamarávati Division	"	2
8.	Káraiyúr Division	"	2
9.	Tirumayam Division	"	2
10.	Kílánilai Division	"	2
11.	Sengirai Division	"	2
12.	Virálimalai Division	"	2
13.	Nírpalani Division	"	2
14.	Kíranúr Division	"	2
15.	Kudumiámalai Division	"	2
16.	Kunnándárkoil Division	"	2
17.	The Muhammadan constituency ...	Special	1
18.	The Christian constituency	"	1
		Total...	35

The Electoral Roll.—In order to be entitled to be enrolled as an elector of the Legislative Council, a person must have resided in a constituency for not less than 100 days in the year preceding the date of preparation of the electoral roll, and must be a pattàdàr or holder of inàm lands or both, paying a land—revenue assessment of Rs. 10 or more, or must be assessed either in a municipality to an aggregate amount of not less than Rs. 3 per annum in respect of one or more of the following taxes,

namely, property tax, tax on companies, or profession tax, or in a Union Panchayat or Village Panchayat to not less than Rs. 2 per annum in respect of house tax, or must derive an annual income of not less than Rs. 350 per annum in the State from sources other than agriculture, or must be a graduate of a recognised Indian or British University, or must be in receipt of a pension of not less than Rs. 25 *per mensem* from any Government, or local or special body constituted by law. No person shall have his name entered in the electoral roll of more than one general constituency. Persons who have been adjudged by a competent court to be of unsound mind or who are below the age of 21 shall not be enrolled. Persons convicted of an offence under chapter IX-A of the Indian Penal Code (offences relating to elections) punishable with imprisonment or who have been found guilty of corrupt practices in violation of the election rules in force in the State shall have their names removed from the roll and shall not be registered thereon for a period of five years from the date of conviction or the report of the election commissioner, or if not on the electoral roll, shall not be registered for five years.

Regulations.

The following is the list of Regulations in force in Pudukkóttai State.

Year.	Number.	Short title.	Repeals and Amendments.
1880	II	Revenue Arrears Recovery Regulation.	Amended by Regulations V of 1903; III of 1904; II of 1911; and I of 1932.
1882	II	A Regulation to declare certain Acts of British India as law in the State:- 1. The Indian Oaths Act X of 1873. 2. The Prisoners' Testimony Act XV of 1869.	......

Year.	Number.	Short title.	Repeals and Amendments.
1891	I	A Regulation to provide for the punishment of breaches of contract by Artificers, Workmen and labourers in certain cases.	Amended by Regulation I of 1932.
1892	III	Arms Regulation	Amended by Regulations II of 1915; and I of 1932.
	IV	Extradition Regulation ...	Amended by Regulations VI of 1912; V of 1921; I of 1932; and V of 1937.
1893	I	Earth Salt Suppression Regulation.	Amended by Regulation I of 1932.
	II	Police Regulation	Amended by Regulations III of 1907: II of 1920; III of 1923; Repealed in part and amended by Regulation III of 1931; Amended by Regulations I of 1932; II of 1934; and IV of 1934.
1895	I	A Regulation for avoiding loss by default of Public Accountants.	Amended by Regulations V of 1926; VII of 1926; I and III of 1932.
	III	Court Fees Regulation ...	Amended by Regulations II of 1896; IV of 1908; II of 1909; III of 1921; I of 1932; III and IV of 1935 and VIII of 1936.
1896	I	A Regulation to assimilate the law relating to Post Offices in Pudukkóttai to that in force in British India.	Amended by Regulation I of 1927.
1896	II	A Regulation amending the Court Fees Regulation.	.....
	III	A Regulation to afford greater protection to Judicial Officers.	......
	IV	A Regulation to give effect to certain unregistered leases of immovable property belonging to the Chinnaranmanai Jágir.	......

Year.	Number.	Short title.	Repeals and Amendments.
1897	I	The Pudukkóttai Gambling Prevention Regulation.	Amended by Regulation I of 1920.
	II	The Epidemic Diseases Regulation.	Amended by Regulation I of 1932.
1898	I	The Pudukkóttai Sanitary Regulation.	Repealed in part by Regulation IX of 1930; Amended by Regulation I of 1932.
1899	I	A Regulation to amend Section 75 of the Indian Penal Code.	......
	III	A Regulation for the extradition of Criminal Tribes.	Amended by Regulation I of 1932.
	IV	A Regulation to compel persons resorting to Public Offices to record their finger impressions when required to do so by certain officers of the State.	Amended by Regulation I of 1932.
1901	I	The Prevention of Cruelty to animals Regulation.	Do.
	II	The Pudukkóttai Tolls Regulation.	Amended by Regulations III of 1903; III of 1915; I of 1921; III of 1924; II of 1927; Repealed in part and amended by Regulation IX of 1930; and amended by Regulation I of 1932.
1902	I	The Pudukkóttai Glanders and Farcy Regulation.	Amended by Regulation I of 1932.
1903	I	The Pudukkóttai Compulsory, Vaccination and Town Vital Statistics Registration Regulation.	Amended by Regulations III of 1912; I of 1932 and V of 1936.
	II	The Pudukkóttai Registration of Births and Deaths Regulation.	Amended by Regulation I of 1932.
	III	The Pudukkóttai Tolls Amending Regulation.	......
	V	Revenue Recovery Amending Regulation.	Amended by Regulation I of 1932.
	VI	Railway Protection Regulation ...	Do.

Year.	Number.	Short title.	Repeals. and Amendments.
1905	I	Registration Regulation ...	Amended and repealed in part by Regulation III of 1909; Amended by Regulations II of 1917; II of 1925; IV of 1925; I of 1929; VIII of 1930; IV and XI of 1931; I of 1932; VI of 1935 and II of 1936.
	II	Stamp Regulation	Amended by Regulations IV of 1911; II of 1918; IV of 1923; I and II of 1932; II of 1935 and VII of 1936.
	III	Revenue Recovery Amending Regulation.	......
1906	I	The Press and Registration of Books Regulation.	Amended by Regulations IV of 1907; VIII of 1928; and I of 1932.
1907	I	The Pudukkóttai Majority Regulation.	Amended by Regulations IX of 1926; VIII of 1931; and I of 1932.
	II	The Pudukkóttai Guardians and Wards Regulation.	Amended by Regulation I of 1932.
	III	The Pudukkóttai Police Amendment Regulation.	......
	IV	The Press and Registration of Books Regulation.	......
	V	The Copyright Regulation ...	Amended by Regulation I of 1932.
1908	I	The Pudukkóttai Transportation Regulation.	Do.
	IV	The Pudukkóttai Court Fees Amendment Regulation.	......
1909	II	The Pudukkóttai Court Fees Amendment Regulation.	......
	III	The Pudukkóttai Registration Amendment Regulation.	......
	IV	The Pudukkóttai Village Conservancy Regulation.	Repealed in part by Regulation III of 1930; Amended by Regulation I of 1932.

Year.	Number.	Short title.	Repeals and Amendments.
1910	I	The Pudukkóttai Chief Court and Second Appeals Regulation.	Amended by Regulations IV of 1918; III of 1920; Repealed in part by Regulation II of 1921; Amended by Regulations VI of 1929; and V of 1935.
1911	I	Revenue Enquiries Regulation ...	......
	II	Revenue Arrears Recovery Amendment Regulation.	......
	III	Succession Certificate Regulation...	......
	IV	Stamp Amendment Regulation ...	Amended by Regulation I of 1932.
1912	I	Treasure Trove Regulation ...	Do.
	III	Pudukkóttai Town Vital Statistics Amendment Regulation.	......
	IV	Land Acquisition Regulation ...	Amended by Regulations I of 1925; and I of 1932.
	V	Forests Regulation	Amended by Regulations I of 1932 and VI of 1934.
	VI	Extradition Amendment Regulation.	......
	VII	Religious and Charitable Endowments Regulation.	Amended by Regulation I of 1932.
	IX	Places of Public Resort Regulation.	Amended by Regulations II of 1924 and I of 1932.
1913	II	A Regulation to introduce some British Indian Acts as law into the State:— Hindu Widows' Remarriage Act XV of 1856. Indian Easements Act V of 1882. Bankers Books Evidence Act XVIII of 1891. Partition Act IV of 1893. Interest Act XXXII of 1839. Lunacy Act IV of 1912. Indian Explosives Act IV of 1884.	......

Year.	Number.	Short title.	Repeals and Amendments.
1913	III	Amending Regulation introducing British Indian Acts:—	
		Indian Contract Act IX of 1872.	
		Specific Relief Act I of 1877.	Amended by Regulation VI of 1930.
		Whipping Act IV of 1909.	
1914	I	Suits Authorisation Regulation ...	
	II	Immunity from Arrest Regulation.	Amended by Regulation I of 1932.
	III	Naval and Military News Regulation.	Do.
1915	II	Arms Amendment Regulation ...	......
	III	Tolls Amending Regulation ...	......
	IV	Traffic Regulation	Amended by Regulation I of 1932.
	VI	A Regulation to introduce Madras Land Encroachment Act III of 1905.	......
1916	II	Provident Fund Regulation ...	......
1917	I	Petroleum Regulation ...	Amended by Regulation I of 1932.
	II	Registration Amending Regulation.	......
	III	Hindu Transfers and Bequests Regulation.	Amended by Regulation IV of 1931.
	IV	Motor Vehicles Regulation ...	Amended by Regulation VI of 1925 and I of 1932.
	V	Game Preservation Regulation ...	Amended by Regulation I of 1932.
1918	I	Pudukkóttai Prisons Regulation ...	Do.
	II	Stamp Amending Regulation ...	......
	IV	Chief Court and Second Appeals Amending Regulation.	......
	(Proclamation.)	Tanning and Tanning Materials Proclamation.	Repealed in part by Darbar's Notification dated 30—6—1919.
	(Proclamation.)	Current Gold and Silver coin Proclamation.	......

Year.	Number.	Short title.	Repeals. and Amendments.
1919	I	Indian Soldiers (Litigation) Regulation.	Amended by Regulation I of 1932.
1920	I	Gambling Prevention Amending Regulation.	......
	II	Police Amending Regulation ...	......
	III	Pudukkóttai Chief Court and Second Appeals (Amending) Regulation.	......
	IV	Registration of Societies Regulation.	Amended by Regulation I932.
	VI	Kazis Regulation	Do.
		Hackney Carriage Rules ...	Amended by Darbar's Notifications dated 11-7-1921 & 14-11-1922.
1921	I	Tolls Amending Regulation ...	......
	II	Chief Court and Second Appeals (Amending) Regulation.	......
	III	Court fees Amending Regulation ...	......
	IV	Poisons Regulation... ...	Amended by Regulation I of 1932.
	V	Pudukkóttai Extradition (Amending) Regulation.	......
	VII	Pudukkóttai Agricultural Pests and Diseases Regulation.	......
1923	III	Pudukkóttai Police (Amending) Regulation.	......
	IV	Pudukkóttai Stamp Amending Regulation.	......
	V	State Grants Regulation ...	......
1924	II	Places of Public Resort (Amendment) Regulation.	......
	III	Pudukkóttai Tolls (Amending) Regulation.	......
	IV	Pudukkóttai Legislative Council Regulation.	Amended by Regulations IV of 1927; I of 1932 and II of 1937.
	V	Pudukkóttai Election Offences and Inquiries Regulation.	......
1925	I	Land Acquisition (Amendment) Regulation.	......
	II	Pudukkóttai Registration Amendment Regulation.	......

Year.	Number.	Short title.	Repeals and Amendments.
1925	III	Pudukkóttai Village Panchayat Regulation.	Amended by Regulation IX of 1931.
	IV	Registration (Amending) Regulation.	......
	VI	Motor Vehicles (Amendment) Regulation.	......
	VII	Pudukkóttai Electricity Regulation.	Amended by Regulation VI of 1926.
	VIII	Pudukkóttai Elementary Education Regulation.	Amended by Regulation IV of 1937.
1926	I	Criminal Tribes Regulation ...	Amended by Regulations VII of 1928 and II of 1934.
	II	General Clauses Regulation ...	......
	III	Pudukkóttai Cinematograph Regulation.	Amended by Regulation VIII of 1926.
	IV	Pudukkóttai Village Courts Regulation.	Amended by Regulation IV of 1936.
	V	Pudukkóttai Public Accountants' Default (Amending) Regulation.	......
	VI	Pudukkóttai Electricity (Amendment) Regulation.	......
	VII	Pudukkóttai Public Accountants' Default (Amending) Regulation.	......
	VIII	Pudukkóttai Cinematograph (Amendment) Regulation.	......
	IX	Pudukkóttai Majority (Amending) Regulation.	......
	X	Pudukkóttai Usurious Loans Regulation.	......
1927	I	Pudukkóttai Post Office (Amendment) Regulation.	......
	II	Pudukkóttai Tolls (Amendment) Regulation.	......
	III	Pudukkóttai Emigration Regulation.	......
	IV	Pudukkóttai Legislative Council (Amendment) Regulation.	......
1928	I	Pudukkóttai Transfer of Property Regulation.	Amended by Regulations V and VI of 1930; IV of 1931 (as amended by Regulation XI of 1931) and I of 1935.
	II	Pudukkóttai Negotiable Instruments Regulation.	......

Year.	Number.	Short title.	Repeals and Amendments.
1928	III	Pudukkóttai Trusts Regulation ...	......
	IV	Pudukkóttai Code of Criminal Procedure.	Repealed in part by Regulation II of 1913; Amended by Regulation V of 1924 and V of 1931.
	V	Pudukkóttai Penal Code ..	Amended by Regulation I of 1899; V of 1924 and VII of 1931.
	VI	Pudukkóttai Amending Regulation.	......
	VII	Pudukkóttai Criminal Tribes (Amendment) Regulation.	......
	VIII	Pudukkóttai Press and Registration of Books (Amendment) Regulation.	......
	IX	Pudukkóttai Insolvency Regulation.	Amended by Regulation I of 1933.
	X	Pudukkóttai Survey and Boundaries Regulation.	......
	XI	Pudukkóttai Cattle Trespass Regulation.	......
1929	I	Pudukkóttai Registration (Amendment) Regulation.	......
	II	Pudukkóttai Small Causes Courts Regulation.	......
	III	Pudukkóttai Evidence Regulation.	......
	IV	Pudukkóttai Code of Civil Procedure.	Amended by Regulation VI of 1930.
	V	Pudukkóttai Companies Regulation.	......
	VI	Pudukkóttai Chief Court and Second Appeals (Amendment) Regulation.	......
	VII	Pudukkóttai Limitation Regulation.	Amended by Regulation I of 1930.
	VIII	Pudukkóttai Hindu Inheritance (Removal of Disabilities) Regulation.	......
1930	I	Pudukkóttai Limitation (Amendment) Regulation.	......
	II	Pudukkóttai Markets Regulation...	......
	III	Pudukkóttai Village Conservancy (Amendment) Regulation.	......
	IV	A Regulation to provide for certain matters in connection with the taking of the census.	Amended by Regulation I of 1935.

Year.	Number.	Short title.	Repeals and Amendments.
1930	V	Transfer of Property (Amendment) Regulation.	......
	VI	Transfer of Property (Amendment) Supplementary Regulation.	......
	VII	Ancient Monuments Preservation Regulation.	......
	VIII	Pudukkóttai Registration (Amendment) Regulation.	....
	IX	The Pudukkóttai Municipalities Regulation.	Amended by Regulations IV of 1933; I of 1934 and I of 1937.
1931	I	The Cattle Disease Prevention Regulation.	......
	II	The Pudukkóttai Prevention of Adulteration Regulation.	Amended by Regulation VII of 1934.
	III	The Pudukkóttai Police Amendment Regulation.	......
	IV	The Pudukkóttai Transfer of Property (Amendment) Supplementary Regulation.	Amended by Regulation XI of 1931.
	V	The Pudukkóttai Criminal Procedure Code (Amending) Regulation.	......
	VI	The Hindu Law of Inheritance Amending Regulation.	......
	VII	The Pudukkóttai Penal Code Amending Regulation.	......
	VIII	The Pudukkóttai Court of Wards Regulation.	......
	IX	The Pudukkóttai Village Panchayat Amending Regulation.	......
	X	The Pudukkóttai Abkari Regulation.	......
	XI	The Pudukkóttai Registration Amending Regulation.	......
1932	I	The Pudukkóttai Repealing and Amending Regulation.	......
	II	The Pudukkóttai Stamp (Amendment) Regulation.	......
	III	The Pudukkóttai Extradition (Amendment) Regulation.	......
1933	I	The Pudukkóttai Insolvency (Amendment) Regulation.	......
	II	The Pudukkóttai Co-operative Societies Regulation.	Amended by Regulation VII of 1935.

Year.	Number.	Short title.	Repeals and Amendments.
1933	III	The Pudukkóttai Irrigation Regulation.	......
	IV	Ths Pudukkóttai Municipalities (Amending) Regulation.	......
1934	I	Pudukkóttai Municipalities (Amendment) Regulation	......
	II	The Pudukkóttai Amending Regulation.	......
	III	The Pudukkóttai Matches (Excise Duty) Regulation.	......
	IV	The Pudukkóttai Police (Amendment) Regulation.	......
	V	The Pudukkóttai Military Regulation.	......
	VI	The Pudukkóttai Forest (Amendment) Regulation.	......
	VII	The Pudukkóttai Prevention of Adulteration (Amendment) Regulation.	......
1935	I	Transfer of Property (Amendment) Regulation.	......
	II	The Pudukkóttai Stamp (Amendment) Regulatlon.	......
	III	The Pudukkóttai Court Fees (Amendment) Regulation.	Amended by Regulation IV of 1935.
	IV	The Court Fees (Amendment) Regulation.	......
	V	The Pudukkóttai Chief Court and Second Appeals (Amendment) Regulation.	......
	VI	The Pudukkóttai Registration (Amending) Regulation.	......
	VII	The Pudukkóttai Co-operative Societies (Amendment) Regulation.	......
	VIII	The Pudukkóttai Christians Marriage and Divorce Regulation.	......
1936	I	A Regulation to prohibit the making of certain loans and credits.	Repealed by Regulation VI of 1936.
	II	Registration Regulation Amending Regulation.	......
	IV	The Pudukkóttai Village Courts Amending Regulation.	......

Year.	Number.	Short title.	Repeals and Amendments.
1936	V	The Pudukkóttai Compulsory Vaccination and Town Vital Statistics Registration (Amendment) Regulation.	......
	VI	The Pudukkóttai Repealing Regulation.	......
	VII	The Stamp (Amending) Regulation.	......
	VIII	The Pudukkóttai Court Fees (Amendment) Regulation.	......
	IX	The Pudukkóttai Tolls (Amending) Regulation.	......
1937*	I	The Pudukkóttai Municipalities (Amending) Regulation.	......
	II	The Pudukkóttai Legislative Council (Amending) Regulation.	......
	III	The Pudukkóttai Wireless Regulation.	......
	IV	The Pudukkóttai Elementary Education (Amendment) Regulation.	......
	V	The Pudukkóttai Extradition (Amendment) Regulation.	......

* (Brought up to June 30, 1937 only.)

CHAPTER XVI.

ADMINISTRATION OF JUSTICE—LAW AND ORDER.

SECTION I.—COURTS OF JUSTICE.

"In the internal arrangement of his Province, he (the Raja) is absolute. He has the power of life and death. He enacts laws, appoints Courts of Justice, Civil and Criminal." (Major Blackburne). It is the aim of the present chapter to trace the administrative history of these prerogatives.

Some light is thrown on primitive judicial methods by an inscription of the 13th century A. D. at Kudumiàmalai (No. 601), dated the 2nd year of Víra Pàṇḍya II or III (?). It relates to the investigation and trial of a case of theft of sacred ornaments from the inner shrine by some Siva Brahmins. A bench was impanelled of the leaders of the surrounding 'provinces,' 'cities,' and villages, who accordingly assembled, 'fully and without any exception,' and summoned the accused. The Court held a consultation with the 'great Bhattars' in the very presence of Sàmantanar, the King's Governor, and on their advice, a fire ordeal was instituted, and the suspected persons were required to handle a red-hot iron rod. Accordingly Kunran Pangan, Kunran Puṟṟidankondàn, Periyàn-dévan and Onṟàyiṟam Serundi submitted to the ordeal and burnt their hands as might have been expected. In the meanwhile Kunran Serundi, probably frightened by the ordeal, turned approver, and the guilt was brought home to the Brahmins who were thereupon charged with having transgressed 'right conduct, and proved the enemies of Siva.' They were sentenced to imprisonment, their lands—tanks, and fields, trees overground, and wells underground—so runs the document—were confiscated, and those who had purchased the lands of the offenders or taken them on mortgage were ordered to relinquish them to the temple, on receipt of the sums they had originally advanced.

That such trials by ordeal were common and were considered a sure test of innocence or guilt is evident from a much later inscription at Ràngiam dated 23rd *Panguni* of the year *Pingala* (1737 or 1797). It relates to the settlement of a dispute over a channel between the owners of Maravani éndal and the residents of Tirumà(nàdu). The decision of the Raja's agent was in favour of one Nàgappan of Maravani éndal who underwent a fire ordeal unharmed in the shrine of Pulavaikàtchi Amman of Pàganéri. Another 18th century inscription at Mélathàniyam records the settlement of a dispute between the Pallars and the Paraiyars of the village about the right to certain privileges and honours. One Vírasinnu Nàyakar decided in favour of the Pallars since a member of their community had successfully undergone the ordeal of dipping his fingers into a pot of boiling ghee.

This method of trial was not invariably resorted to. Inscriptions in the State and in the other Tamil districts refer to the trial of civil disputes and crimes (often even such grave crimes as murder) by village or town councils. The sentence often took the form of compelling the offender or offenders to make a gift of land or money to a temple or endow some such object as the maintenance of a lamp in a temple.

The Judiciary before 1877.

Dharmasanam.—When the country came under the Tondàimans, we find the Ruler dispensing justice as the patriarch of his people, sometimes alone, and sometimes with the help of Pandits versed in legal lore. The first Court of this kind was the *Dharmásanam* or Seat of Justice of Raja Vijaya Raghunàtha (1789–1807). It was not however exactly a Court; but rather an advisory council over which the Raja presided. It was composed of a Brahmin Pandit or jurist, of all the high officers of the State, and of a number of respectable non-official citizens. The law administered was the old Hindu

Law as stated and expounded in the *Smritis* and *Dharmasástras.** With the exception of the Police-Tahsildar-Magistrates, the *Dharmásanam* was the only regular Court in the land, Civil or Criminal, original or appellate.

The Tahsildar's Courts.—Crude and summary justice was administered by the Tahsildars. They held no regular Courts. They were not aided by Pandits, kept no record of their decisions, and did not report them to the Government. Their decisions were very few; being confined almost exclusively to disputes regarding succession amongst the villagers under their immediate authority. Injuries committed by men of influence or in power they never noticed, and received no complaints against the great Jagírdàrs.

After the death of the founder of the *Dharmásanam*, the administration of justice fell into discredit. The great chiefs—the Jàgírdàrs—took the law into their own hands, administered it in their own areas, and settled differences among themselves, through arbitrators selected from their own class. As for the *Dharmásanam*, it appears to have fallen into desuetude, for Major Blackburne writing in 1808 observes that the only regular Courts were those of the Tahsildars.

During the minority of Raja Vijaya Raghunatha Raya Tondaiman, at the instance of Major Blackburne, a reconstruction of the judicial machinery was effected, the chief feature of which was the establishment of the *Nyáya Sabha* in the place of the old *Dharmásanam.*

Nyaya Sabha, about 1810.—Inspired by the state of anarchy that prevailed, frequent proclamations were issued declaring that the landowners, however powerful and high-placed, had no judicial authority, that they were as much amenable to law as any one else, and that complaints against

* Vignánésvará's *Mitákshara*, a running commentary on Rishi Yágñavalkya's *Hindu Law*, and the digests, called *Smriti Chandriká* and *Vyavahára Mádhavíya.*

them would be received at the capital and the offenders brought to book. A supreme tribunal was established, and was named *Nyáya Sabhá* as in the neighbouring Tanjore Raj. It possessed what may be called an inquiring and reporting staff or Lower Court composed of five Judges who received petitions, summoned witnesses, heard, and recorded their opinions. Once a week the full Court sat composed of these five, the Managers of the State, * the Sirkíl, the Karyast, (the Secretary), the Accountant, and the Guardian of the princes, and presided over by the Prince; heard the report of the Five in the presence of the parties; and either confirmed their decision or remanded the case for fresh trial and report.

The powers and jurisdiction of this Court were defined. It had no jurisdiction over offences committed during the previous administration. But its territorial jurisdiction included areas belonging to the Jàgírdars. For civil suits a limitation of 10 years was prescribed, but in special circumstances the Raja in Court could suspend this rule. The timely execution of the decrees by State agency after a time became the regular business of one of the Judges, subject to the supervision of the Chief Judge.

Kotawal's office, 1811.—In the year 1811, when the *Nyáya Sabhá* had been more or less completely organised, a Kotawal's office was opened at the capital. It was a Police Station, a Magistrate's Court, and a Civil Court of Small Causes rolled into one.

The Danda, and Mudra Sabhas, about 1813.—Possibly owing to the inexperience of the youthful Raja—Vijaya Raghunatha Raya, the *Nyáya Sabhá* developed the germs of lower and higher Courts held loosely together by an anomalous arrangement under which some Judges sat on both the benches, and by the incompetence of the lower tribunal to deliver a final decision.

* Two managers were appointed by the British Resident for Pudukkóttai to carry on the administration during the minority of Rája Vijaya Raghunátha Tondaiman.

Almost as soon as it had been established, or a year or two later, and certainly by the year 1813, the *Nyáya Sabhá* split into three tribunals, the *Nyáya Sabhá* proper, the *Danda Sabhá*, and the *Mudra* or *Mudrita Sabhá*. Here was a division, for the first time, of judicial work into Civil and Criminal, original and appellate, and of civil suits, according to the value of the subject matter. The *Mudrita Sabhá* was a subordinate Civil Court with jurisdiction up to '100 *pons* or Rs. 125.' The *Danda Sabhá* was a Court of original criminal jurisdiction. The new *Nyáya Sabhá* exercised both original and appellate powers; it heard appeals from the other two Courts, and disposed of original civil suits valued at Rs. 125 and over. It was also competent to review the decisions of, and exercise appellate jurisdiction over, the Kotawal's office on a reference from the Managers.

To the *Nyáya* and *Danda Sabhás* were appointed five Judges and a Pandit in law. Of the five Judges one was *Pravádikár* (Chief Judge) and the others *Sabhyás* (Councillors). Two of these Councillors were set apart for each Court; but the *Pravádikár* presided, and the Pandit assisted at each Court and in every case. The decision was by a majority; the Chief Judge had two votes, and the *Sabhyás* and the *Pandit* a vote each.

Though exercising appellate functions, the *Nyáya Sabhá* still continued to be a purely advisory body. It could not deliver a judgment. As of old, its decisions, original and appellate, were submitted for the Ruler's sanction, and the Raja continued to adjudicate weekly, sometimes with the Pandits that happened to be with him, and sometimes with the Sirkíl or any of the Judges summoned for the purpose.

When the final decision was arrived at, the judgment was delivered in the name of the Ruler, over the signature of the Chief Judge, and the Raja's seal as indicated by the formula:—

Sammatih Prádvivákasya Chakravarti-vipaschitah (the assent of Chakravarti the learned first Judge).*

* Chakravarti (Aiyangar) was Chief Judge about 1813.

Srì Rájá Bahadúr $\frac{\text{Nyáya}}{\text{Danda}}$ Sabhá mudrám Jayapradám Brahadambá Sadápátu Gokarnésa Kutumbini. (May Brihadambá, consort of Gokarnésa † always protect the victory-giving seal of the $\frac{\text{Nyáya}}{\text{Danda}}$ Sabhá of the Rájá Bahadúr).*

A Tamil report on the administration of the State dated *Vijaya* (1826–7) tells us that the *Nyáya Sabhá* tried civil cases relating to loans of money and rights in landed property, and the *Danda Sabhá*, Criminal offences such as highway robbery, burglary, arson and murder. The usual punishments were whipping, imprisonment ranging from a month to 12 years, and driving the offender round the streets mounted on a donkey and wearing a garland of *erukku* (*Calotropis gigantea*) flowers. When a Judge received bribes he was compelled to repay twice the amount received and his property was confiscated. He was then mounted on a bullock and driven through the streets while his offence was proclaimed to the accompaniment of tom-toms, and finally he was conducted to the frontier and expelled under pain of death if he re-entered.

Simple as the judicial machinery was, it met the needs of the times. Mr. Bayley, the Resident, wrote in 1841:—"I have had no complaints against the proceedings of the law Courts any more than the petty remarks which every man thinks himself entitled to make when the decree is against him."

The further development of the courts followed more or less the course of political events. Between 1839 and 1844 there was another minority—that of Raja Ramachandra Tondaiman, and the country was governed by the Dowager Rani assisted by the Sirkil and other principal officers. Since these had enough work on their hands without undertaking the function of Judges, the *Nyáya Sabhá* was ordered, for the first time in its history, to pronounce its own judgments without the previous approval

* Gokarnésa and Sri Brihadamba are the God and Goddess of the temple at Tirugokarnam.

of the Raja, and an appeal was allowed to a higher Court composed of the Sirkíl and other dignitaries.

The Huzur Adawlut Court, 1845.—In the transitional arrangements outlined above lay the germs of the Huzur or Raja's Appeal Court which was regularly constituted when the Raja assumed direct charge about 1844. The Court was at first composed of the Ruler and his minister, but as the administration of law became more and more technical owing to the adoption about this time of British Indian statutes, a third member, a legal expert, was added in 1863 under the name of Appeal Judge. At first the Huzur Court heard appeals from the *Nyáya Sabhá* alone; but from 1860 when the latter Court was deprived of all appellate jurisdiction, the Huzur Court became the sole Court of Appeal. It still, however, partook more of the nature of a judicial office and council of justice than of a regular Court; and for a long time it transacted revenue business in addition to disposing of appeals.

Town Small Cause Court (1844) and Munsiff's Courts (1860).—In 1844, the Kotawal's office was superseded by a *Chinnakadan Sabhá* (Small Cause Court). The original procedure in the *Mudrita Sabhá* was that its three Judges sat together to hear every case and decided by a majority. In 1857 owing to the accumulation of business, the Judges began to sit separately, each with a file of his own, so that the tribunal was split up into three Courts. This led in 1860 to the abolition of the Sabhà as such and the establishment of three Munsiff's Courts one at each of the Taluk Headquarters.

Civil and Sessions Court, 1866.—The old *Nyáya Sabhá* which had been shorn of its appellate authority and continued solely as an Original Civil Court, since 1860, and the *Danda Sabhá* which had run an uninterrupted career from the date of its origin, were amalgamated in 1866, and formed into a Civil and Sessions Court after the model of the British Indian District Courts, with power to try both Civil suits and Criminal cases, but with only original jurisdiction.

Thus by the year 1866, new Courts had sprung up under new names, and with better defined functions and status; and these were the Huzur Adawlut or Appeal Court, the Civil and Sessions Court which did the bulk of the higher judicial work, and the four Subordinate Civil Courts, namely, the Small Cause Court in the Town, and the three Munsiff's Courts in the Taluks. The magisterial branch of the judicature was also re-organised about this time. The Indian Penal Code, and the Criminal Procedure Code were adopted in 1867–8, and under their operation the Karbar became the Chief Magistrate, the Deputy Karbar a Joint Magistrate, and the Tahsildars and their deputies Subordinate Magistrates.

Though however by 1866, the Courts had acquired new names and administered new laws, the personnel and the spirit of the Courts remained much the same as before. This fact together with the weakness of the administration led to dilatory and unsatisfactory work calculated to defeat the ends of justice. Mr. Clarke (Political Agent, 1858–60) wrote in 1859 :—

"I rather question the expediency and desirableness of continuing our elaborate judicial system in Pudukkóttai. It is a system too essentially English; it has little or nothing Indian in it, and does not accord either with the original institutions of the country or with the habits and opinions of its inhabitants. Its forms are cumbrous and its delays great."

"The constitution of all the Courts, Civil, Criminal, and Magisterial in Pudukkóttai", wrote Mr. Levinge (Political Agent, 1860–5) in 1864, "is cumbrous, and antiquated; the Judges are too numerous—there is not work for so many of them."

The anomalies of the Huzur Court.—During the 42 years of its existence from 1845 to 1887, the Huzur Court reflected faithfully the anomalies pointed out by the two Political Agents. And no wonder. The time had gone by when the Raja could deal justice in simple patriarchal fashion. The advice of lay officers and elders was no longer sufficient, now that Law was ever becoming more technical and professional owing to the multiplicity

of acts, rulings, and commentaries. It was an anachronism for the highest Court of Judicature to contain a majority of two laymen, the Ràjà and the Sirkíl, against a solitary professional Judge.

The Reorganisation of the Judiciary in its present form.–

The Chief Court, 1887.—The time had therefore come, as Sir Sashia Sàstriar put it, for the Ràjà and his minister to retire gracefully to their natural and dignified position of Law Givers. In 1879 the appellate jurisdiction of the Huzur Court over the Munsiff's Courts was transferred to the Civil and Sessions Court, and on the first day of 1887 the Huzur Court was formally abolished, and the Civil and Sessions Court was constituted into a mixed Original and Appellate Court renamed the Pudukkóttai Chief Court. It was composed of three Judges each of whom attended to Civil and Sessions work by turns. The other two sat as Appellate Judges. A full Bench was convened whenever the two disagreed. Sentences of life-imprisonment (equivalent to capital punishment under State Law) or of forfeiture of property were submitted to the Ràjà for confirmation. Provision was also made for second appeals, though effect was not given to it till 1910.

The abolition of the Munsiff's Courts, 1879–1889.—As remarked by Mr. Levinge, the Courts and the Judges were too numerous. So the Munsiff's Courts were abolished one after another in the ten years from 1879 to 1889. The Kolattúr Court was amalgamated with the Town Court in 1879, and the Tirumayam Court with that of Àlangudi in 1880. The remaining two Courts were abolished in 1889.

At the time of its formation the Civil jurisdiction of the Chief Court was limited to suits in which the value of the subject matter exceeded Rs. 300 on the Original side, and Rs. 30 on the Small Cause side. When the Munsiff's Courts were abolished these restrictions were withdrawn. In 1896–7, the Small Cause jurisdiction was reduced to Rs. 50 so as to give suits of higher value the benefit of an appeal—a concession that was however partly withdrawn in 1912 when the limit was raised to Rs. 100.

Rural Small Cause Court (1890–1893)—Owing to the general backwardness of the rural population, it was not found possible to organise village Munsiff's Courts as in British India. To supply this want, between 1890 and 1893 the rural Sub-Registrars were invested one after another with Small Cause powers with jurisdiction up to Rs. 20. This was a great relief to the villagers who had previously had to go to the capital for the settlement of petty claims. At first the Chief Court exercised concurrent jurisdiction with the Sub-Registrars but in 1896 this power was transferred to its Registrar. In 1912, the jurisdiction of the Chief Court Registrar was raised to Rs. 30.

The Second Appeal Court, 1910.—The justification for a Second Appeal Court was not merely that a provision for a second appeal was popular with litigants. The arrangements under which the Chief Court came into existence provided for such an institution. Under the constitution of the Chief Court each Judge sat to hear both original and appeal cases, and was alternately judge and judged. Moreover the first appeal was practically of no use when the two Judges disagreed, for in that case the original finding was upheld. For these reasons an independent Court of Second Appeal was felt to be necessary, and one was constituted in 1910.

Further reforms and changes.—In 1879 court fees were introduced, which were intended to check frivolous litigation in addition to defraying at least part of the cost of the Judiciary. In 1880, the Head Clerk of the Civil and Sessions Court (now Registrar of the Chief Court) was authorised to receive and file papers, grant copies, issue notices and call for records; this made for despatch of routine work. Judgments of the Chief Court began to be written in English in 1894–95. Reports of its decisions have been published since 1895–96. An examination for the enrolment of local pleaders called Muktyars, was instituted in the same year. A Law Reporter was appointed in 1904, and assessors were first associated with the Judges in Sessions trial. Under Section 5 of the Insolvency Regulation an Official Receiver was appointed in 1915.

In 1926, in order that the Appellate Bench of the Chief Court might be distinct and independent, the number of judges was raised from three to five. The Chief Judge and one of the Puisne Judges attended exclusively to appellate work while the other three judges disposed of all original and sessions work. In 1929, however, when a Judge's post fell vacant, the vacancy was not filled and the Darbar ordered that the Chief Court should work with four judges. The practice of deputing one of the Puisne Judges exclusively for appellate work, was discontinued; and the original work was distributed among the three puisne judges each of whom sat by turns with the Chief Judge to hear appeals.

The opinion was expressed in some quarters that this system whereby the three puisne judges tried original suits and in turn presided over the sessions court and sat with the Chief Judge to hear appeals, had not been satisfactory, and had led to delay. It was pointed out that his original work was held up while each puisne judge was engaged in appellate work, and that appellate work could not proceed uninterruptedly since partly heard appeals posted before a particular bench had to lie over until the same bench sat again. The Darbar issued a Press Communiqué dated October 14, 1934 inviting an expression of public opinion on the subject and in particular on three schemes that had been suggested. After a careful examination of the statistics relating to the number of suits (both original and small cause) and of appeals filed and disposed of, the percentage of disposals, and the average time taken to dispose of each class of suits and appeals during the preceding 21 years, the Darbar formed the opinion that pendency and delay in the disposal of suits and appeals had not assumed proportions so serious as to justify them in incurring the expenditure involved in appointing an additional judge as had been suggested. In regard to the question whether the judges should be recruited from within the State or outside it the Darbar were not prepared to tie their hands by laying down any hard and fast rules. Efficiency they declared, should not be

sacrificed to any rigid principle. The Darbar did not approve the suggestion that the judges should be appointed for a term of years. Considering the scale of emoluments that the State could afford to pay, it was clear that this system would render the judges' posts much less attractive and make it more difficult to secure men of adequate attainments and experience to fill them. The Darbar were unable to approve of the suggestion that there should be an independent Court of First Appeal. On the contrary, they said that it was desirable that all the judges including the Chief Judge should do both original and appellate work in rotation, but the latter arrangement has not been found practicable. A suggestion that Munsiff's courts might be constituted to hear suits of the value of Rs. 1,000 or less did not commend itself to the Darbar, since the State could not afford to pay salaries sufficient to attract competent and experienced candidates for the Munsiff's posts. The Darbar ordered the continuance of the Second Appeal Court on the same model, since it would be very costly to recruit European ex-judges of the High Court for this work as was suggested to them by some people.

The pecuniary jurisdiction of the small cause courts has undergone various modifications. In 1919 the pecuniary jurisdiction of the Registrar of the Chief Court and of the rural small cause courts was raised from Rs. 30 to Rs. 50. In 1920 the pecuniary limit of the small cause jurisdiction of the Chief Court was raised from Rs. 100 to Rs. 200. A notification dated October 25, 1926, restricted the local limits of the small cause jurisdiction of the Chief Court in respect of suits of the value of Rs. 50 and below to those places within the State over which none of the Rural Small Cause Judges had jurisdiction; and the small cause powers exercised by the Registrar of the Chief Court were withdrawn; but they were restored in 1929. From January 1, 1935, Rural Small Cause Judges have been empowered to try small cause suits not exceeding Rs. 100 in value, and the Registrar of the Chief Corut has similar powers in the Registration sub-district of Pudukkóttai.

Changes affecting criminal justice are the appointment (1894-95) of Stationary Magistrates at Taluk headquarters, the conferment (1895-96) of third class powers on rural Sub-Registrars, and the formation of Bench Courts for the Town (1913-14), and Tirumayam (1924-25).

The Dewan Peishkar who as Chief Magistrate of the State corresponds to the District Magistrate in the Madras Presidency except in the matter of summary trials was till 1925 chiefly engaged with appeals from the subordinate magistracy and revisions of the orders of the other first class magistrates. In 1925 a new post, that of the Additional Chief Magistrate, was created, and this officer has since largely relieved the Dewan Peishkar of his magisterial duties.

By the introduction of the Pudukkóttai Transportation Regulation No. I of 1908, the Sessions Court was authorised to award sentences of transportation for life, but these had to be discontinued from 1921, since the Government of India had ordered the closing of Port Blair to convicts from Southern India. Section 14 of Regulation I of 1910 which required that sentences of imprisonment for life or forfeiture of property should be submitted to His Highness the Raja for confirmation was repealed by Regulation II of 1921. The provision of law requiring the reference to a Full Bench of all cases in which there was a difference of opinion between the two judges sitting in the First Appeal Bench was repealed, and in all such cases the decision of the original court is now confirmed.

Under the Village Panchayats Courts Regulation, No. IV of 1926, village courts have been established in the Town and at seven other places—Alangudi, Tirumayam, Kíranur, Karambakkudi, Ponnamaràvati, Arimalam and Perungalur.

The working of the law courts at present.—

General.—The administration of Civil and Criminal Justice and to some extent, the constitution of the various courts in the State are on the British Indian model. The Chief Court

exercises the powers of a High Court, both in Criminal and Civil matters, except that in civil matters, a second appeal on points of law, and in certain circumstances, on questions of fact, lies to a special court of second appeal which consists of two judges and is constituted every year. The original civil jurisdiction of the Chief Court extends over regular suits of all values and its small cause jurisdiction over suits not exceeding Rs. 200 in value. The Registrar, Chief Court, and the nine Rural Sub-Registrars, (at Àlangudi, Tirumayam, Kolattur, Karambakkudi, Kilànilai, Annavàsal, Viràlimalai, Ponnamaràvati and Perungalur) are ex-officio small cause judges. The Chief Court is the only court in the State competent to try original suits and hear appeals. The appellate work in the Chief Court is disposed of by a bench of two judges consisting of the Chief Judge and one of the other judges who sit in rotation with him.

Besides the Chief Court, the Rural Small Cause Courts and the Registrar's Small Cause Court, there are eight village courts which try suits of a money value of Rs. 30 and also with the consent of both the parties suits in which the value of the subject-matter does not exceed Rs. 100.

I. Civil Justice.—

The number and nature of civil suits (original and small cause) instituted in all the courts of the State in faslis 1344 to 1346 are shown in the following table.

Nature of Suits.	Number.		
	F. 1344.	F. 1345.	F. 1346.
1. Suits relating to money or movable property.	9,118	7,729	8,115
2. Mortgage suits	434	328	305
3. Other suits relating to immovable property.	159	98	108
4. All other suits	185	134	155
Total ...	9,896	8,289	8,683

The total value of suits instituted in all the civil courts was as follows :—

Fasli 1344	....	Rs. 26,54,112
Fasli 1345	....	Rs. 23,51,153
Fasli 1346	....	Rs. 18,15,044

Of the suits instituted in the Chief Court in fasli 1346, 21 per cent were by money-lenders against agriculturists, 33 per cent by money-lenders against non-agriculturists, 3 per cent by traders against buyers, 41 per cent between other classes of people and the rest brought either by or against the Sirkar.

On the original side there were in fasli 1346, 2,223 cases for disposal, of which 1,412 or 63·5 per cent were disposed of. The average duration of a contested regular suit was between 336 and 445 days during faslis 1344 to 1346, and of other suits between 41 and 75 days.

In fasli 1346 the Registrar's Small cause Court had 707 cases, of which 612 were disposed of. The Rural Small Cause Courts had altogether 2,052 cases and disposed of 1,914. The Panchayat Courts disposed of 4,575 cases out of 4,995 that came up for disposal.

Insolvency.—Insolvency petitions are filed and adjudicated in the Chief Court and transferred to the Official Receiver for the administration of the estate and the framing of schedules. The number of insolvency petitions filed during fasli 1346, was 172 including 77 pending at the commencement of the fasli. Of this number 36 were dismissed for default and on 80 orders of adjudication were passed.

Appeals.—The number of regular appeals for disposal in fasli 1346 was 456, of which 216 or nearly 47 per cent were disposed of. 112 revision petitions were filed, and orders were passed on 76. The number of applications for executions disposed of was 6,622 out of 8,242, and the number of processes executed, 28,923.

115 appeals valued at Rs. 4,19,957 came before the Second Appeal Court in fasli 1345, and 81 were disposed of.

Financial.—The expenditure on the Chief Court in 1936–37 was Rs. 83,242. The total revenue for the year 1936–37 in all the courts in the State excluding the Panchayats courts, was Rs. 2,22,664.

II. Criminal Justice.

The Chief Magistrate and the Additional Chief Magistrate are first class magistrates. A special first class magistrate is appointed whenever necessary. There are seven second class magistrates—three of them are Tahsildar-magistrates who seldom exercise magisterial powers while the other four are the stationary sub-magistrates in the Town and at the three Taluk headquarters. There are six rural sub-registrars (at Karambakkudi, Perungalúr, Kílànilai, Ponnamaràvati, Viràlimalai and Annavàsal) who are invested with third class magisterial powers. The Bench Courts at Pudukkóttai and Tirumayam exercise third class powers.

The number of cases for trial in Magistrates' courts in 1936-37 was 6,698 of which 6,304 were disposed of. Cases instituted under the Indian Penal Code show little variation in number during the last few faslis; but there has been an appreciable decrease in the number of offences under special and local laws, such as the Elementary Education Regulation (due to the temporary suspension of the operation of the Elementary Education Regulation during the severe drought of 1935), and the Police Regulation. The number of cases tried by the Sessions Court in fasli 1346 was 26, of which 25 were disposed of. The Additional Chief Magistrate disposed in the fasli of all the 171 appeals that came before him, the Sessions Court of 42, and the Chief Court on the appellate side of 50 out of 53.

Extradition.—The law relating to the surrender of persons who have committed offences in British India and are found within the State limits has been defined in the Extradition

Regulation, No. IV of 1892. Such persons are surrendered to the British Courts on the application of British Magistrates made through the Resident at Trivandrum. In 1936-37, 18 persons were produced before the State courts on extradition warrants issued by the Resident and 21 persons were surrendered by the State for trial in courts outside the State.

III. Miscellaneous.

Inspection.—All the rural Small Cause Courts are annually inspected by the Judges of the Chief Court, and all the Panchayat Courts by the Registrar of the Chief Court. The Additional Chief Magistrate inspects all the Magistrates' Courts.

Law Reporting.—The reported judgments of the Chief Court and the Second Appellate Court up to 1930 have been printed. The reports for the years 1931 to 1935 are in the Press.

Library.—The Chief Court library contains about 1,530 volumes and subscribes for Indian and English Law Reports and the important law journals.

Legal Practitioners.—There were 201 legal practitioners on the rolls of the Chief Court on June 30, 1937,—128 vakils who had enrolled for life and 25 first grade pleaders, and 48 Muktyars practising in the various courts of the State. There is a Bar Association with a library in the capital Town.

SECTION II.—POLICE.

The opening of a Kotawal's office in 1811 marks the first departure from the old Kavalgar (village watchman) system. As we have seen (see page 424), it was a police house and court combined. In 1857, the Kotawal came under the Police amin or Town Sub-Magistrate. The Tahsildars began to exercise police powers in the Taluks. When the Police Regulation of 1875 was passed, these officers were relieved of police duties and a police force was organised on the British Indian model.

Reforms in the Police Force.—A school of instruction was opened in 1880 for recruits and reserves. Since 1910, officers are being sent to Vellore for training. A Prosecuting Inspector was appointed in 1913; the post was abolished in 1923 under the retrenchment scheme, but was revived in 1926. As it was found difficult to get suitably qualified men for the force, the pay of constables was raised in 1913 and again in 1917.

On the advice of Mr. Blackstone, then Superintendent of Police for Trichinopoly, the posts of Circle Inspectors were abolished in 1917, and the Sub-Inspectors were placed in charge of the divisions. This arrangement was not found very successful; in 1919 the old system of Circle Inspectors was restored, and with the help of two British Officers lent by the Madras Government, the department was reorganised on the British model.

Between 1924 and 1926, a number of unimportant outposts were abolished, while new stations and beat houses were opened in places where crimes showed a tendency to increase. There are now 9 investigating centres (Town, Karambakkudi, Àlangudi, Kíranur, Annavàsal, Viràlimalai, Tirumayam, Arimalam, and Ponnamaràvati) and 7 outposts (Malayur, Àdanakkottai, Séplanthope, Odayàlipatti, Puduppatti, Èmbal and Kàrayur).

In 1919, a small traffic party was constituted to regulate motor and cart traffic in the Town, and in 1924, the party was given special training in traffic control.

Mr. Hume's reorganisation.—The State Police Force had to its credit certain achievements in the past. To mention but two cases,—in 1891–92, the local police rendered material aid to the British Police in arresting a gang of dacoits who wrecked a running train; and in 1916, the State Deputy Superintendent of Police was decorated by the Government of India for the co-operation and help rendered by the State Police in the detection of cases of dacoity. But events proved that the State Police had neither the experience nor the training to cope with an exceptional situation, such as rioting or mass disturbance.

On the unexpected outbreak of mob violence on a large scale in the Town on the morning of July 15, 1931, the Police and Military forces were utterly taken by surprise and overpowered. "In consequence of the failure of the Police to cope with the riots in the capital on July 15, the services of an officer of the Madras Police were obtained for the purpose of reorganising the State Police Forces. As a result of the re-organisation the strength of the Armed Reserve was increased by one Sergeant-Major, one head constable and ten constables so as to provide for the maintenance of an adequate striking force over and above the average number of men generally required for the performance of routine duties. These latter were also reduced to the lowest limit and the Armed Reserve as far as possible relieved of all duties that would interfere with their training and ready mobilisation. Intense drill and exercises were carried out to improve the morale of the force and unfit men were weeded out and replaced by men of better physique. The old 476 muskets having been for the most part destroyed or lost during the riots, the Reserve was re-armed with 410 muskets. There was some re-distribution of the Taluk and Town Police in accordance with actual requirements and the net result of the scheme of reorganisation was a Police Force consisting of one Commissioner of Police, one Sergeant-Major, four Inspectors, 12 Sub-Inspectors, one *Jemadar*, 36 head constables and 249 Police constables .... The drill and discipline of the force at the end of the fasli were markedly superior to that at the beginning. Additional lines have been erected to house the whole of the Armed Reserve and armouries of a modern pattern constructed. An armoured Police motor lorry for the conveyance of Police and of prisoners has been purchased. The credit for the improvement in the personnel and material of the force is due mainly to Mr. Hume who drew up and carried through the scheme of reorganisation."*

* Administration Report—Fasli 1341.

The present (fasli 1346) sanctioned strength of the Police Force is one Sergeant-Major, four Inspectors, 12 Sub-Inspectors, one *Jemadar*, 35 head constables and 244 constables.

The following are some figures relating to crimes in the State:—

1. *True cases of cognizable crimes reported.*—

Fasli.		Total.		Grave crimes.
1342	....	344	....	217
1343	....	321	....	275
1344	....	453	....	365
1345	....	558	....	438
1346	....	453	....	347

2. *Minor offences.*—

Fasli		Nuisances.		Offences under special and local laws.
1344	....	1,627	....	450
1345	....	2,207	....	469
1346	....	2,089	....	453

The increase under nuisances during the last two faslis is due to efforts to prevent pollution of the catchment areas and feeder channels of conserved tanks and other drinking water sources.

The offences under local laws relate mainly to the Elementary Education Regulation and Forest Regulations.

3. *Grave crimes.*—

Faslis.	Murder.	Culpable homicide.	Dacoity.	Robbery.	House-breaking.	Theft.	Cattle theft.
1342	4	2	3	7	60	113	28
1343	4	2	3	11	59	162	34
1344	7	...	9	17	94	141	97
1345	4	1	5	29	107	196	96
1346	2	1	...	10	88	149	97

4. *Percentage of detection of grave crimes.*—

Faslis.		I. P. C. cases.
1344	...	43·90
1345	...	43·30
1346	...	45·20

5. *Property lost and recovered.*—

Faslis.	Amount lost.	Recovered.	Percentage.
	Rs.	Rs.	
1342	15,795	4,226	26· 7
1343	33,218	21,390	64· 3
1344	23,348	6,969	29· 8
1345	20,091	8,814	43· 3
1346	15,221	6,399	42·04

Prevention.—The Kallars who are numerous in the North-eastern and North-western parts of the State are by tradition a predatory race. They are extremely clannish, and since they live on both sides of the frontier, they could for long elude the vigilance of the police both in the State and in British India. They were dexterous in cattle-lifting. Their criminal propensities were however, restrained by the influence of the local Servaikàrs who formed the Kàvalgar watch.

In the latter half of the last century, the lawless propensities of the Kallars both in the State and outside it were intensified by the weakening of the old feudal ties and economic distress resulting from centuries of the *amáni* tenure. The Police organisation was then inadequate. The co-operation between the State and the British Police which was established after Sir Sashia Sàstriar took up the reins of administration, the system of registration and observation of K. D.'s, the

identification of criminals by finger-prints and anthropometrical measurements, the incessant preventive watch kept over the criminal tribes and the deterrent punishments inflicted by the courts, have contributed to the reform of the Kallars. They are now taking to cultivation, and the progress of education coupled with settled occupation have done much to wean them from their criminal propensities.

Maravars, Valayans, Kuravars, Kaladis and Pallans (see the chapter on ' The People ' for a description of these tribes) are other tribes who for long led a life of crime.

In 1918, the Darbar approved the proposals for registering the Arimalam Koravars under the Criminal Tribes Act. In 1922, Kaladis and Valayans were added to the register of dangerous criminal classes. The strength of these tribes on the register on the last day of fasli 1346 is shown below.

	Men.	Women.
Koravars	79	60
Kaladis	85	...
Valayans	179	....

A Reclamation School for Korava boys was opened in 1926 with 11 boys. It was first located in Tirumayam, but was subsequently transferred to the capital. An account of the working of the school is given in the chapter on ' Education. '

There are no wandering criminal tribe gangs indigenous to the State. Detachments of wandering gangs from British India occasionally pass through the State. The State Police watch their movements and send them under surveillance from station to station till they leave State territory when they are passed on to the British Police.

Proceedings under the security sections of the Criminal Procedure Code are instituted against persons suspected to be dangerous, and if necessary they are bound over to be of good behaviour. These proceedings have resulted in a diminution of crimes.

In 1919, an Intelligence Bureau was opened on the British model. It has at present a staff of a Sub-Inspector, one Head Constable and one Constable.

Administration.—The head of the Police Force was designated Head Quarter Inspector till 1889, Inspector till 1908, and Deputy Superintendent till 1918. He was working under the supervision of the District Superintendent of Police, Trichinopoly, who was ex-officio Superintendent of Police for the State. With effect from January 1, 1928, the head of the State Police was made an independent officer with the designation of Commissioner of Police–cum–Commandant. In 1933, arrangements were again made with the Madras Government for the periodical inspection of the State Police and Military Forces by the District Superintendent of Police, Trichinopoly, who is now the Inspecting and Advising Officer of the State Police and Military Forces. The head of the Police is now designated Superintendent of Police—cum—Officer in charge of the Military Forces.

The following statement shows how Pudukkóttai is equipped with Police stations and outposts as compared with the surrounding Madras districts.

Serial Number.	Districts.	Area in square miles.	Population.	Number of stations.	Number of outposts.	Total.	Area served by one outpost or station.	Population served by one outpost or station.
							Sq. miles.	
1.	Pudukkóttai State.	1.179	4,00,694	9	8	17	69·3	23,570
2.	Trichinopoly ...	4,314	19,13,245	36	13	49	88·0	39,046
3.	Ramnad ...	4,819	18,38,955	34	18	52	92·7	35,364
4.	Tanjore ...	3,742	23,85,920	43	13	56	66·8	42,605
5.	Madura ...	4,911	21,95,747	43	9	52	94·4	42,226

SECTION III.—PRISONS.

The Central Jail.—Convicts sentenced to hard labour were originally confined in the old fort at Tirumayam. They were removed to the capital in about 1810 to improve the roads, dig wells, and repair tanks. The old Town Jail was built in about 1830, and to it all offenders sentenced to imprisonment for over a fortnight were sent. Though pronounced a 'most excellent Jail' by Mr. Blackburne in 1846 it stood in a congested locality close to the bazaar. Though its accommodation was sufficient for only 44 prisoners under British rules, it was considered to be large enough to house a maximum of 130. Its sanitation and discipline were anything but satisfactory. Its occupants were huddled together in ill-ventilated rooms without even the convenience of a latrine.

The present Jail was planned in 1887 and completed and occupied in 1889. It stands outside the Town in an airy locality with every arrangement necessary for the proper housing of convicts. Since its erection, convict life in the Jail has conformed more and more to the standards of discipline and humanity obtaining in British India. The Madras Jail Code was introduced in 1895, and under it provision was made for the appointment of women warders, the grant of remission for good conduct and the substitution of ragi for rice as the normal diet. The old practice of fettering convicts even when ill was abandoned in 1897. Life convicts had been a source of danger to their fellow-prisoners and the officers; and arrangements were therefore made in 1900–1 to confine them apart, and in 1908 to send them to the British penal settlements; but this latter arrangement, as we have seen (see page 433), had to be discontinued from 1921.

Since 1934, a portion of the Central Jail has been set apart for the detention of lunatics. Increased accommodation has recently been provided. The Jail and its perimeter are lit by electricity.

Attached to the Jail is a dispensary under the charge of a Sub-Assistant Surgeon assisted by a full-timed compounder. The Chief Medical Officer of the State inspects the Jail and its inmates about once a week.

Convict labour has differed from time to time, but the change has been gradually in the direction of making it less humiliating and more useful in the way of providing an occupation for after life. Convicts were originally employed on street-sweeping and road-making. Bell-metal casting was introduced in 1894. In the following year the convicts were relieved of the street scavenging. In 1903, labour outside the Jail was abolished. Gardening is now a popular occupation and convicts take to it with zest. The main industries carried on in the jail are weaving of cotton, gingelly oil pressing, carpentry and smithy work. In 1933–34, the Darbar sanctioned a scheme by which prisoners who were employed on jail labour could earn an addition to their gratuity or remuneration if their out-turn of work reached the required standard. The scheme is intended to give the convicts a greater interest in their work by enabling them to earn something which will be a help when they come to be released. It promises to be successful.

Population.–The table below shows the number of prisoners admitted to and released from the Central Jail during 1936–37.

—	Convicts.		Under-trials.		Civil.		Lunatics.	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
Number at the beginning of the fasli.	111	1	15	1	9	...	8	...
Number admitted during the fasli.	280	56	171	5	169	...	11	...
Number discharged during the fasli.	272	55	177	6	166	...	12	...
Number remaining at the close of the fasli.	119	2	9	...	12	...	7	...

Consequent on the Town riot and the Andakkulam and Kannangudi dacoity cases a supplemental jail attached to the Central Jail was temporarily opened in September 1931 to accommodate the large number of under-trial prisoners, and was closed in the next fasli.

Conduct of Prisoners.—The conduct of the prisoners has been satisfactory on the whole; and jail offences are few. In the riot that broke out in the capital on July 15, 1931, the Central Jail was broken into by the mob and the prisoners set at liberty. Shortly after order was restored; most of the prisoners either surrendered or were arrested and restored to custody. The convicts who surrendered voluntarily within thirty-five days from the date of the riot were awarded remissions.

There is a convicts' school in the Central Jail, and the illiterate inmates are taught to read and write. Religious and moral instruction is imparted.

Finance.—The receipts from the Jail, (chiefly from the industries) amounted to Rs. 11,602 in 1936–37; and the expenditure to Rs. 26,617. The average cost of diet per head *per diem* was two annas.

Administration.—The supervision of the jail was formerly vested in the Kotawal. It was subsequently transferred to the Police Amin, to the Civil and Sessions Judge, and then to the Deputy Karbar in 1867. The Central Jail is now under the Jail Superintendent under whose orders the Jailor and his staff work.

Sub-Jails.—Besides the Central Jail, there are 8 subordinate jails situated at the following places:—Àlangudi, Tirumayam, Kolattur, Karambakkudi, Ponnamaràvati, Kílànilài, Viràlimalai and Annavàsal. In these civil and under-trial prisoners and convicts sentenced to a week and less are confined. These sub-jails are under the control and supervision of the Additional Chief Magistrate.

SECTION IV.—REGISTRATION.

Registration was introduced into the State in 1875 by Regulation I of 1875 which was subsequently amended and consolidated by Regulations I of 1885, I and III of 1888, and IV of 1895 which were again repealed by Regulation I of 1905. This Regulation has since been amended by Regulations I and III of 1909, II of 1917, II and IV of 1925, I of 1929, VIII of 1930 and XI of 1931. The existing law makes registration compulsory for mortgages, sales, gifts, exchange or leases for a year and over of immovable property, while it is optional for bonds and promissory notes (compulsory till 1909) and revenue and court sales (compulsory till 1917).

There are at present 10 Registration offices distributed as follows:—

1. Pudukkóttai (1875)
2. Kílànilai (1875)
3. Karambakkudi (1875)
4. Viràlimalai (1875 and 1886)
5. Alangudi (1877)
6. Tirumayam (1877)
7. Kolattur (1877)
8. Ponnamaràvati (1886)
9. Perungalur (1890)
10. Annavàsal (1896)

The year in which each was opened is shown in brackets. The average cultivable area per Registration office is 79 square miles and the average population served by an office is 40,069 according to the last census. The earliest stations were not, as the list shows, the Taluk Headquarters, because for two years (1875–77) the Tahsildars exercised the powers of Registrars in their own stations. Though Viràlimalai is one of the earliest offices it remained closed between 1881 and 1886 for want of work. For similar reasons the office opened at Kudumià-malai in 1893 was transferred to Annavàsal in 1896; that opened at Arimalam in 1896 was closed in 1918; and the offices opened at Kàraiyur in 1896 and at Malayur in 1904 were closed in 1923. A Sub-Registry office was also constituted for the Pudukkottai Sub-district in 1908 but it was amalgamated with the office of the District Registrar in 1911.

The office of the District Registrar is also a central record office to which are sent annually the registers and books of the several offices for safe custody and issue of certified copies.

All the Sub-Registrars excepting the Town Sub-Registrar are small-cause judges and with the exception of the Town Sub-Registrar and those at Taluk Headquarters, third class magistrates also.

An examination of registration statistics shows that the number of registered documents has had two marked periods of increase and two of decline. The periods of increase synchronised with the *amáni* settlement and the enfranchisement of inàms, as a result of which owing to the creation of a property in the land, it was freely sold and mortgaged. The two periods of fall were those of the amending Regulations of 1909 and 1917 when the registration of certain classes of documents was declared optional. Otherwise the fluctuations in the figures can be explained by the following general principles:—(i) The immediate effect of an unfavourable season is to increase registration, but a succession of bad years causes a falling off, because all the money that could be raised by the sale or mortgage of land has been raised. (ii) In a prosperous year succeeding years of adversity, there is slight increase in registration. (iii) When good and bad years alternate over a somewhat long period, registration generally increases in bad years and falls off in good years. (iv) If however a number of consecutive years are prosperous, registration either declines or is stationary.

Apart from such incidental variations, since the introduction of Registration in 1875 there has been a steady increase in the number of documents registered, and an equally steady rise in the value of land as recorded in the Registration books, both of which point to a general improvement in the economic condition of the people. Since 1928, however, there has been a fall in the number of registered documents which evidently has to be attributed to the prevailing economic depression and the fall in the value of land.

There was a perceptible fall of 1,227 documents in 1935–36; the decrease was largest under sales and mortgages. The total number of documents registered during faslis 1344 to 1346 is as below:—

Fasli	1344	....	11,238
	1345	....	11,011
	1346	....	10,823

220 documents were registered in 1936–37 by or on behalf of Co-operative Societies; and the amount leviable but foregone by the department on this account was Rs. 1,365. Documents by or on behalf of Co-operative Societies were registered free till 1935; but now they are registered on payment of half the usual fees.

Financial.—The total receipts of the department in 1935–36 amounted to Rs. 31,227. The expenditure on the department excluding the portion debitable to "Law and Justice" on account of the Sub-Registrars exercising small cause and magisterial powers, was roughly Rs. 27,200.

Notary Public.—With effect from July 1, 1935, the Town Sub-Registrar was appointed Notary Public for the whole State. Rules for the conduct of this office were issued on May 14, 1936.

The following table shows how the State is equipped with Registry offices as compared with the adjoining districts.

Serial Number.	District.	Area in square miles.	Population.	Number of Sub-Registry offices.	Average area served by one Sub-Registry office.	Average population served by one Sub-Registry office.
					sq. miles.	
1.	Pudukkóttai State ...	1,179	4,00,694	10	118	40,069
2.	Trichinopoly ...	4,314	19,13,245	24	180	79,718
3.	Ramnad ...	4,819	18,38,955	30	161	61,298
4.	Tanjore ...	3,742	23,85,920	38	98·5*	62,787
5.	Madura ...	4,912	21,95,757	29	169	75,715

* Density of Population in ... { Pudukkóttai State 340 per square mile. Tanjore District 638 per square mile.

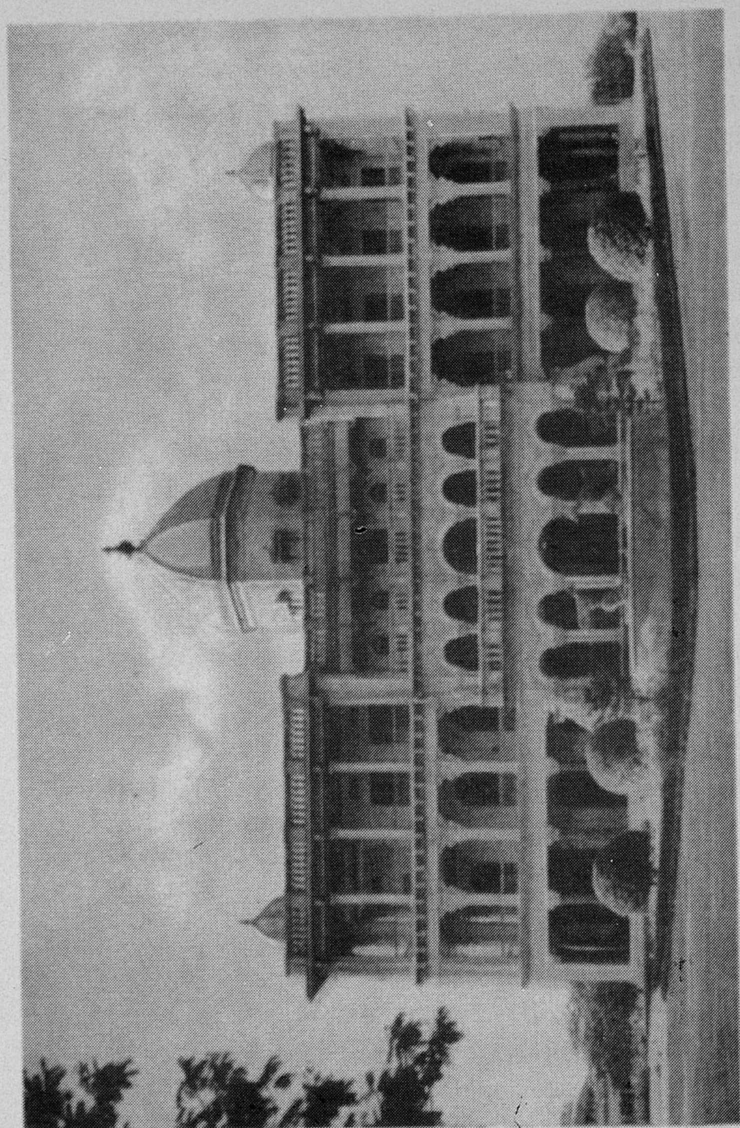
CHAPTER XVII.

THE PALACE ESTABLISHMENT.

The Palace establishment includes a variety of departments more or less domestic in nature and intended to minister to the personal comforts, pleasures, and dignity of the Ràjà. According to a list prepared in 1881–2 it consisted of nine hundred and twenty-four hands. Of these, 239 including 126 Sepoys, 21 Troopers, 25 Sardàrs, 40 Ràzu warriors, and 27 Bandsmen constituted a Military force and Body-Guard; 155 were employed in the Stables; 153 in the Palace stores; and 51 in conducting worship and performing other religious ceremonies; and 326 others formed a motley group of dependants, pensioners, favourites, insignia bearers, palanquin-bearers, cooks, musicians, and menials.

Since the year mentioned above, there have been frequent reorganisations of staff, and redistribution of duties; but in the main the several departments of work have practically remained the same; and these are noticed below except the military an account of which has been given in a separate chapter.

The Stables.—The Stables formerly comprised an ***Ánai láyam*** for elephants, a ***Periya láyam*** for horses and bullocks, a ***Vandi mál*** for carriages and a tent establishment. The ***Periya*** or ***Aramanai láyam*** contained the horses intended for the Ràjà's personal use only. The ***Bápu láyam*** which housed the horses of the Ràjà's friends and relatives, and ***Kutti láyam*** which contained the cavalry mounts were later merged with the ***Periya láyam.*** At present the Stables comprise three sections, the Elephant Stables, the Garden Stables (containing the bullocks used in the garden), and the Palace Stables containing the carriages and carriage-horses, the horses of the cavalry and hacks. There are also the State motor cars. The Department was originally under an officer styled the Làya Madyasth (Stables correspondent), and included two ***Sáléstris*** (Veterinary Surgeons),



The officer in charge is at present termed the Stables Superintendent who is under the control of the Palace controller. The Surgeon in charge of the Town Veterinary Hospital inspects the animals in the Stables every day.

The Pujai Vidu establishment looks after the worship in the Srí Dakshinàmúrti temple in the Old Palace, and the several charities enjoined on the State by the Sage Sadàsiva Brahmam, such as the distribution of doles to girls on Fridays, and to Brahmins during *Navarátri*. The establishment consists of two classes of men, (1) those connected with the worship in the temple—*Archakars* (priests), cooks, *Paricharakas* (waiters), servants, etc., and (2) those connected with the *Ugránam* (Stores)—Vichàranakàrs (Supervisors), *Sampratis*, (Store-keepers) and watchmen. A cow-stall was originally attached to the *Púјai Vidu*, (to supply the milk, butter and curds necessary for the worship) and possessed its own staff of cow-herds, and *Kanganis* (watchmen), but it has now been dispensed with as superfluous.

The *Dánádhikár* or Almoner is at the head of the priestly staff, supervises the charities, and attends to the proper performance of the religious functions in the Palace. He is consulted in the matter of *Japams* (public prayers), and *Véda párdyanams* (Védic recitals), and is an examiner in the Dussara examinations. He is assisted in his work by a Palace *Puróhit* (Priest), and an Astrologer.

The Music Establishment.—There are two halls in the old Palace known as the *Sangita Sála* (Music hall) and the *Nátya Sála* (Dancing hall). In one of them was kept a stock of musical instruments such as *Vinais*, *Sárangis*, *Saragaths*, Violins, and flutes. A company of dancers, singers and instrumental musicians were attached to the Palace, and required to entertain the Ràjà during *Sannáhams* (processions), and whenever he worshipped publicly at the Srí Dakshnàmúrti or Sri Brihadambàl temples. This company has since been disbanded, and there are

at present two bands of musicians and singers called respectively the *Periya mélam*, and the *Chinna mélam*.* There are also two bands—a "Carnatic band" which plays Indian music on western instruments, and a Military brass band which plays at the New Palace once a week, and also at State dinners, Garden parties, and on similar occasions. It also plays once a week in Ananda Bagh and at the Holdsworth Park. There is also a Muhammadan orchestra of cymbals, pipes, (***Karna***, and ***Surna***), and drums (***Dokra***, ***Nagara***, etc.). This plays every morning and afternoon at the entrance to the New Palace—a traditional practice in India.

The Bokkusham is the Palace Treasury containing jewels, robes, and other valuables. The officer in charge of it is called the ***Bokkushakár***.

The Vaidyam establishment looks after the health of the Ràjà and his family, and formerly included ***Ayurvedic*** or ***Siddha*** physicians. The Chief Medical Officer of the State now attends on the Palace, assisted by a special Sub-Assistant Surgeon.

The Palace kitchens.—These contain a store-room (formerly called *Periya Ugránam*), and two separate kitchens, in one of which vegetarian food is prepared by a staff of Brahmin cooks, and in the other, non-vegetarian food by non-Brahmin cooks.

Domestic Establishment.—Besides the cooks employed in the kitchen, there were formerly numerous other domestics such as the ***Pandárams*** who were in charge of the wardrobe; ***Gólnáyaks*** who attended to lighting; ***Imarti-maistris*** who saw to the Palace repairs; ***Bógis*** (palki-bearers), ***Thombarams*** (sweepers), gardeners, tailors, dhobies, and barbers. These are still employed, though their number and name have varied from time to time.

The ***Menial Establishment*** is also numerous. Originally the major-domo was called ***Adappakáran*** or ***Pán-sérvai***, because it was he who handed betel leaf and areca nut to the Ràjà. He had under him two grades of attendants—the ***Periya Pillayándáns*** (senior servants) and ***Chinna Pillayándáns*** (junior servants).

* See Chapter III, page 135.

The menial staff consists at present of a number of daffadars and dalàyats under the control of the *Jemdàr*. There is also a valet in charge of the ward robe.

The Dignity Establishment.—Foremost among the men of this establishment are the Brahmin Harikàrs who distribute *Pansupári* (betel leaf and areca-nut) during marriages and Darbàrs in the Palace, and during processions and festivals. There are also numerous insignia bearers such as *Kodaikkárans, Dìvatti sérvais* and *Thadi sérvais.* The *Kodaikkarans* are umbrella bearers of whom there were two classes formerly called respectively, the *Ul-kudais* and the *Veli-kudais* according as their duties lay in or outside the Palace. The *Dìvatti sérvais* are torch-bearers. The *Thadi sérvais* carry the different *Chóbda* sticks. In addition to these are other persons who at the time of processions carry the various paraphernalia—such as the standard, the *Jaya Béri* (victory drum), Javelins, *Ganda-bherunda* (a figure of a two headed eagle), etc., and are in charge of the State horses and the elephants carrying the gold and silver *Howdahs*. There are again some personal attendants, and the holders of the insignia-*Chowri* and *Chámaram* (Yak-tail and whisk). Formerly there were also a class of poetasters called *Kattiyakárans* and *Bhattu Rázus* who recited on public occasions laudatory verses, and proclaimed the titles, and valorous deeds of the Ràjà and his ancestors, and a court fool who was also story-teller.

The Personal staff of His Highness the Rájá.—An English Tutor is in charge of the education and upbringing of His Highness the present Ràjà who is now a minor. He is assisted by special Urdu, Tamil, Sanskrit and Physical Instructors. His Highness's brothers and sisters have their own governess and teachers.

His Highness has an *Aide-de-camp* who is an officer of gazetted rank.

Administrative.—The administration of the various departments mentioned above was originally under an officer styled the Private Manager, and later the Palace Manager. The present head of the Palace establishment is styled the Palace Controller. The Dewan Peishkar has charge of the ***Pújai vìdu.***

CHAPTER XVIII

THE DARBAR AND DARBAR OFFICE.

The Darbar.* —The head of the administration was originally termed *kàriakarta.* It would appear that towards the end of the 18th century the designation of Sirkíl was adopted. During the minority (1807—1817) of Ràjà Raghunàtha Tondaimàn Bahadur the affairs of the State were managed by two Managers who were near relatives of the Prince, acting under the advice of the Resident. Between 1815 and 1817 (or 1822?) the place of the Sirkíl was taken by a Principal Councillor assisted by two Subordinate Councilors.

During the minority of Ràjà Ramachandra Tondaimàn Bahadur (1839 to 1844), a Council of Regency composed of the Dowager Rani, the Fouzdàr and the Sirkíl carried on the administration. From about 1851 the Sirkíl was assisted by a Deputy Sirkíl. The designation of the Minister was changed from Sirkíl to Dewan in 1885. During the minority of His Highness the late Ràjà, the Dewan became Dewan-Regent, and he was at the head of the administration assisted by an Assistant Dewan.

In 1898 when the late Raja went to England for the first time a Councillor was appointed "to conduct the administration conjointly with the Dewan." The post of Councillor was abolished in July 1908.

In March 1909, a State Council was constituted to exercise some of the powers of the Ràjà, as he had to be absent from the State for reasons of health. It consisted of a member of the Indian Civil Service designated State Superintendent, a Dewan, and the Chief Judge ex-officio. The Superintendent and the

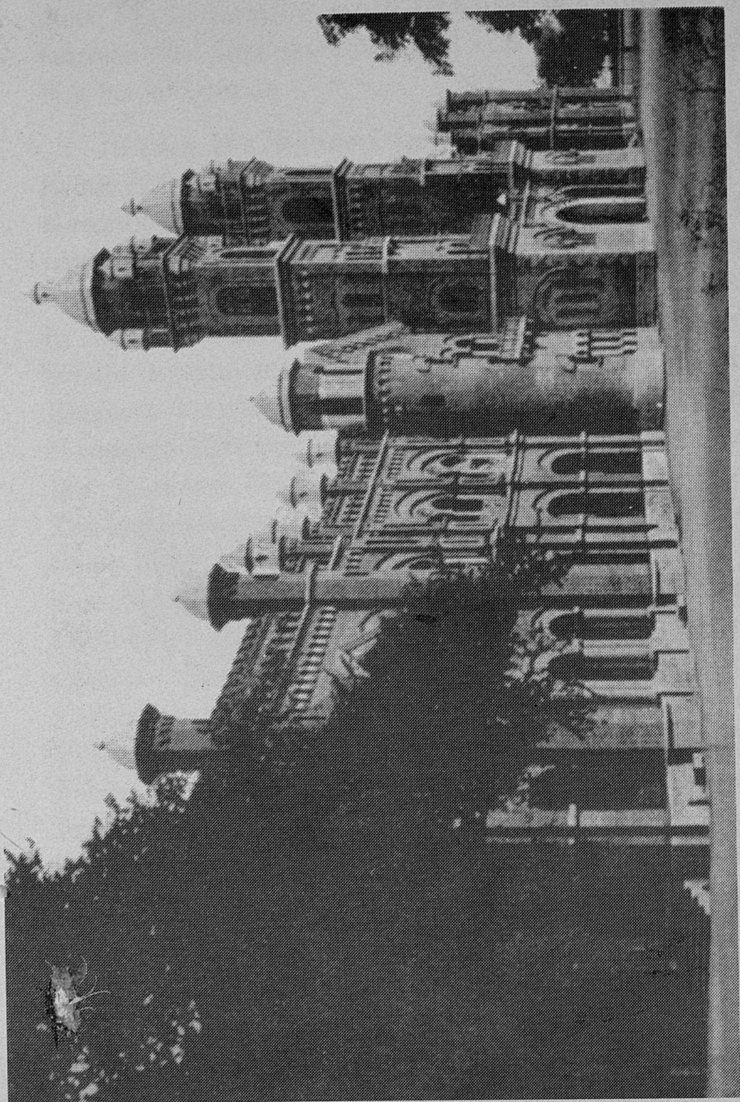
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* A chronological list of the heads of the administration from 1807 to the present day is given at the end of the chapter on 'History.'

Dewan each had his own portfolio; but the Chief Judge had none, but all questions on which there was a difference of opinion between the Superintendent and the Dewan were referred to him for his opinion.

In 1922, His Highness the Raja decided to reside permanently out of India, and arranged in consultation with the Supreme Government, that with effect from October 23, 1922, the administration of the State should be carried on by a Regent. The Regent exercised the powers of the Raja and was assisted by the Dewan in the executive administration of the several departments of the State. His Highness Sir Màrthànda Bhairava Tondaimàn Bahadur died on May 28, 1928, and in November 1928, the Agent to the Governor-General proclaimed His Highness Ràjà Rajagópala Tondaimàn Bahadur, Ruler. The Regent however, continued in that capacity till March 1929 when, under the orders of the Government of India, the State was placed under a Council of administration consisting of a President, a Dewan and the Chief Judge of the State as ex-officio member. The President was deputed to attend the Round Table Conference in London as adviser to the delegate for the South Indian States, and during his absence (September 26, 1930 to February 25, 1931), the administration was entrusted to the Dewan-in-Council, consisting of the Dewan and two Councillors. The President again left for England in September 1931 as delegate for the Madras States, and the Dewan-in-Council (consisting of the Dewan and a Councillor) carried on the administration. This arrangement lasted till November 17, 1931, when the Government of India directed that the future administration of the State during the minority of His Highness the Raja should be carried on by an Administrator assisted by an Assistant Administrator. This is the present arrangement.

The Darbar office.—In the beginning of the 19th century the Sirkíl had hardly any clerical or other staff. Subsequently a single office establishment was considered sufficient for the



executive, judicial, and revenue administration. The Sirkíl himself issued receipts for revenue payments, and till about 1882 when the Chief Court was reorganised, the Huzur or Appellate Court was conducted as a branch of the Sirkíl's (or Huzur) office, the Sirkíl combining in himself the functions of the highest executive and judicial officer.

In Mr. Morris' scale of establishments dated 1867 no mention is made of a separate Sirkíl's office, but the Sirkíl and the two Karbars had an office in common styled the "Office of General Control."

The Sirkíl later acquired a separate office, and by 1881–2 this consisted of a Secretary, an English writer and his assistant, Vernacular Javàbnavises,* Record-keepers and Gumastas (clerks) and the usual menial staff. The Secretary's place was abolished in 1899, and the office was placed in 1908 under a Registrar, with the rank and powers of the Head of a Department, empowered to dispose of routine matters. After 1909 the Dewan's office was called the Darbar office.

An audit branch was added to it in 1896, and all bills relating to establishment, travelling allowance, and contingent expenditure were subjected to pre-audit; and the accounts of the Town and some of the mofussil offices, to an annual local audit. The head of the office was styled the Registrar. The Correspondence Section was then separated and placed under a Manager who was later styled 'Secretary to the Dewan.' In 1923, the Registrar's designation was changed to that of the 'Comptroller of Accounts.' In 1929, the two sections were again placed under a common head—the Chief Secretary to Government; the post is now kept under abeyance, and the two departments are now managed by Office Superintendents under the direct control of the Assistant Administrator.

* Literally "clerks who write replies" (to petitions, etc.)

CHAPTER XIX.

DEVASTANAM AND CHARITIES.

Historical.—Tamil literature of the Sangam period (4th century B. C. to 4th century A. D.) is full of references to *Kóttams* (Hindu, Buddhist and Jain temples). They were built of perishable material such as timber. In the State we find Pallava rock-cut shrines to some of which later structural additions have been made, and also structural temples of the Cóla, Pàndya, Vijayanagar and Màdura styles (Prof. Dubreuil's classification).

There are a very large number of inscriptions in the State relating to endowments of lands to temples made either by Rulers themselves, or by governors or vassal chiefs, or sometimes by merchants or merchant guilds. These endowments were mostly gifts of land, but there were other gifts for the daily recital of the Védas and Tamil hymns (the *tévàram* or the *prabhandam*), or for dancing and theatrical entertainments. These lands endowed to temples under royal authority were known as *dévadánams,* and were tax-free (*iṛaiyili*). The temple committees often assigned the right of cultivation and enjoyment of the *dévadánam* lands to private individuals in return for a fixed share of the yield (Kàràṇkiḷamai).

Sometimes a village assembly or township (*Sabha*) agreed that temple lands should be tax-free and distributed the tax due on them *pro rata* on the other holdings so that the total revenue due to the State from the village was not affected. Such lands are described in the inscriptions as *úrkìḻ iṛaiyili* (tax-free under the township). Private donors making some endowments often agreed to pay the taxes on the land, and deposited an amount of gold or a sum of money in the temple treasury as security.

Donations in gold or money were often made to cover the cost of daily services, commonly for lamps to be kept always burning. Herds of cattle were given to temples to ensure a supply of ghee.

Brahmadéyams were gifts to Brahmins. Villages given to Brahmins versed in the four Védas were known as *caturvédimaṅgalam* or *agarams*. The inscriptions in the State refer to about 15 caturvédimaṅgalams.

Gifts to monasteries, feeding houses, and water-sheds called in the State inscriptions, *Maḍappuram* or *Palliccandam*, *Sálábhogam*, *Sálaiúṭṭu*, etc., were common. One such *palliccandam* was a gift to the Jain Aṇḍàrmadam (monastery) of Ténimalai. An inscription of Vikramakésari (10th century A. D.) in the Kodumbàlúr Muvarkoil mentions the building of three temples, and the institution of a monastery (*maṭha*) with eleven villages attached to it for Mallikàrjuna, a preceptor of the fanatical Saivite Kàlamukha sect and his disciples. A Kumàramangalam inscription records the grant of lands to a Saiva teacher Visvésvara jíyar and his maḍam at Tiruvànaikoil; one at Neivàsal mentions a grant to a maḍam in the same village, and another at Ponnamaràvati to a grant to the Nilamai Aḷagiyan tirumaḍam in the Rajéndra Cólísvaram temple there.

The *dévadánam* lands granted to Siva temples were demarcated by boundary stones marked with a trident (*tiruccúlakkal*), those granted to Viṣṇu temples by stones marked with the cakra (*tiruváḻikkal*) and those granted to Jain institutions (*Palliccandams*) had stones with triple umbrellas carved on them (*tirumukkuḍaikkal*). Lands endowed to maḍams or feeding houses were demarcated by stones bearing the impression of a ladle (*tiruc-caṭṭuvakkal*).

The Tondaimans yielded to none in piety and in their desire to perpetuate these charities. Raghunatha Ràya Tondaiman (1686–1730) enlarged the temple at Kudumiàmalai. To this Ruler is ascribed the building of the chatrams in the Town and at Tirugókarnam. Vijaya Raghunàtha Ràya Tondaiman (Sivagñànapuran Durai), the disciple of the Sage Sri Sadàsivéndra instituted the Dassara festival at Pudukkóttai and built the Shrine of Sri Dakshinàmurti within the old palace.

He also built and endowed *chatrams* not only in the State but in distant Benares. It was he who built the famous *Adhistánam* (shrine over a tomb) of Sri Sadàsivéndra at Nerur in the Trichinopoly district and granted two villages in the State for its maintenance. Ràja Vijaya Raghunàtha Tondaiman built a number of chatrams and made endowments to many temples, both within and outside the State. Ceremonies known as *Tondaiman kattalais* instituted by this Ruler are performed to this day in well known shrines outside the State, such as Rameswaram, Madura, Palni, Trichinopoly and Tirupati. Ràja Ràmachandra Tondaimàn Bahadur attached the utmost importance to the proper maintenance of the temples and their endowments.

Under Devastanams may be included the endowments made to mosques (*Pallivásal mányam*), monastic establishments (*Madappura mányam*), temple-gardens (*Nandavana mányam*) and temples outside the State (*Pararáshtra mányam*). Three endowments deserve special mention because for a long time separate accounts were maintained for them, *viz.*: (1) a tract of 24 villages in Valnàd, the revenues of which were assigned to the palace shrine of Sri Dakshinàmurti Svami, (2) two villages for the maintenance of the *Adhishtánam* of Sri Sadàsivéndra at Nerur, and (3) the lands granted for the temple at Màlaídu close to the capital where the Rani of Ràja Vijaya Raghunàtha performed *Sati*.

Among the classes of inam lands enfranchised in 1888 were the *Brahmadéyams* (gifts to Brahmins) and a few minor *Mányams* (gifts) such as those granted for the up-keep of water-pandals, which may be said to constitute charitable institutions. A brief account of the terms of enfranchisement of these classes is given in the chapter on "Land Revenue."

Till forty years ago, the lands assigned for the up-keep of Devastanams, Chatrams and other charitable institutions were separately administered. Every Devastanam village had its

local establishment, controlled by the taluk Devastanam establishment including separate sub-treasury officers; above the latter were the establishment in Deputy Peishkar's and Dewan Peishkar's Offices. The Devastanam villages had their own irrigation works, which were independent of those of the Ayan lands. In fasli 1306, the Devastanam lands measured 1,07,159 acres or about ⅙th of the total extent of 6,90,080 acres under cultivation in the State. The receipts and expenditure under Devastanam and charities for faslis 1301 and 1306 are tabulated below:—

Fasli.	Opening balance of the fasli.	Receipts.			Total.	Disburse-ments.	Balance.
		Land Revenue.	Extra sources (Interest)	Total.			
1301	2,40,269	1,86,337	19,568	2,05,905	4,46,174	2,03,894	2,42,280
1306	1,75,829	1,83,751	10.605	1,94,356	3,70,185	1,98,268	I,71,917

Amalgamation of Devastamam and Chatram lands with Ayan lands.—The permanent reduction in land assessment and the abolition of tree-tax effected by Sir Sashia Sastriar in 1892 resulted in a fall of Rs. 22,000 in the Devastanam receipts; but the Dewan Regent had not provided for any corresponding reduction under expenditure. Sir Sashia entertained the idea of abolishing the taluk Devastanam establishment and entrusting the work of collection and keeping the accounts to the revenue officers. He did not however do so since there was a substantial surplus to the credit of Devastanam funds, but his successor Mr. Vedantacharlu found it necessary to abolish the taluk Devastanam establishment and transfer their duties to the revenue department while retaining the village and Headquarters staffs. In 1897 rather than reduce expenditure on temples and charities, the Government incorporated the Devastanam and charity revenues with the *Ayan*.

The advantages of this arrangement were thus explained by the Dewan in a letter to the Political Agent.

" The expenditure on account of Devastanam collection and connected charges will be adequately reduced without trenching on the pagoda services. The pagoda services will be permanently ensured without the chance of fluctuation on account of vicissitudes of seasons and consequent oscillations and uncertainties in annual allotments, and in fact the pagodas will be supported permanently relieved of the inconvenience and difficulties of collection of revenue assigned for the purpose. The irrigation works connected with the tanks of the assigned villages will be done along with State tanks, the allotment necessary being provided in future under the head " Irrigation. " The present anomaly of a portion of the revenue collected by State agencies not being brought within the scope of the general budget and review will be removed. Such of the servants who may be retained and who may be absorbed as vacancies occur in other departments of the State, will continue as public servants and enjoy the privileges and advantages of leave, pension, etc." The solitary exception to this scheme of amalgamation was the village of Madukam assigned to the Àvadayàrkóil temple in Tanjore District, which was still continued under the *amáni* tenure at the request of the *Tamburán* of the temple.

The following allotments were made in 1897, the year of the amalgamation.

		Rs.
Temples inside the State...	...	71,774
" outside " ...	...	10,774
Chatrams ...	...	10,607
Dassara festival etc. ...	...	25,000
	Total ...	1,18,155

Results of the Amalgamation.—

The original annual allotment of Rs. 1,18,000 for the Devastanam and charitable institutions has always been exceeded. In fasli 1307, the amount actually spent was Rs. 1,21,000; in 1315, Rs. 1,46,078; in 1325, Rs. 1,39,775 and in 1335, Rs. 1,87,120.

In 1912–13, the Darbar ordered the preparation of a register showing the major services that landholders were required to render at temples; and this was compiled and published in 1914–15. In 1916–17, a Personal Assistant to the Dewan Peishkar was appointed and was placed in immediate charge of the Devastanams. An Inspector and an Assistant Inspector were appointed to assist him. In 1929–30, three Devastanam Inspectors were appointed, one for each taluk, who worked under the Tahsildars. In 1931–32, the posts were abolished and the Firka Revenue Inspectors were entrusted with the direct supervision of temples. Honorary non-official visitors were appointed in 1919–20 to inspect Devastanams and other charitable institutions periodically and bring defects or suggestions for improvements to the notice of Government.

The Devastanam Committee.—(1922–23).

In respect of *paḍitharam* (daily allotments) and management, the religious and charitable institutions in the State may be classed as follows:—

1. temples which have allotments in cash for daily *púja* and festivals;
2. those which have no money *diṭṭams* (allotments) but only *mányams* or lands endowed for the conduct of puja daily or once every few days according to the value and extent of such lands and the popularity and importance of the temples;
3. those which besides having *mányams* receive money grants for festivals; and
4. *chatrams* and other charitable institutions, either managed by the State or by private agencies, but liable to be taken over by the State under the Religious and Charitable Endowment Regulations if mismanaged.

Under the first group are the major institutions which receive a daily *paḍitharam* ranging from one anna to about Rs. 35, besides allotments for festivals. After the Great War of

1914, the general rise in prices made it prohibitively costly to conduct worship on the same scale as before except in a few temples that had been provided with *Sámán diṭṭams* (daily allotment in kind of rice, oil, etc.) The festivals were not conducted so well as before, owing alike to the apathy of the people and to the frequent failure of the *úḻiamdárs* to perform their *úḻiam* services. The numerous minor institutions of the second and third classes suffered similarly. The *pújakans* (priests) came to regard endowed lands in their enjoyment as their private property and neglected their duties. Institutions of the fourth class are mostly *chatrams.* In 1922–23, there were fifteen such institutions under State management and ten under private management. However indispensable they might have been in former times they had lost much of their usefulness after the introduction of the railway and of motor bus services. Of the 14 principal chatrams noted in the margin, those numbered 1, 4, 5, 6, 7, 10, 12 and 13 had ceased by the year 1922–23 to provide food for travellers and become mere resthouses. In one year on the average one Brahmin a day was fed at the Viràlimalai chatram. At Ammàchatram, which was once very popular, the daily average had fallen to four or five. In many chatrams, the people fed were not travellers but local residents. The question, therefore, arose whether all these institutions should be maintained, whether it was any longer necessary to provide food at them and whether the amounts allotted for running them could and should not be reduced.

1. Ichiyadi chatram.
2. Kolaváipatti chatram.
3. Chinniah chatram (Tirumalairáyapuram).
4. Vamban.
5. Áyipatti.
6. Tirumalairáyasamudram.
7. Tirumayam.
8. Kolattur (Ammáchatram.)
9. Virálimalai.
10. Rengammál chatram.
11. Máthur.
12. Káyámpatti.
13. Kodumbálur.
14. Town chatram.

Some of the temples had lost in importance. They no longer attracted worshippers in such numbers as formerly and the offerings made at them had correspondingly dwindled. The

continuance of puja and other services on the old scale could be justified, if at all, only on sentimental grounds. Numerous services for which assignments had been made, had ceased, but the *lávaṇamdárs* responsible for their performance were still in the enjoyment of the *lávaṇams* or endowments attached to them. The question arose whether such *lávaṇams* could not be enfranchised, that is whether the holders could be relieved of the obligation of service and the lands subjected to assessment.

On account of the increased cost of living, the establishment clamoured for increase of pay. Increases were sanctioned here and there, but in view of the facts already mentioned the question naturally suggested itself whether there should not be a general reduction of the establishment accompanied by a revision of the scales of pay.

A suggestion calling for consideration was that many of the temples could be better supervised by local panchayats.

Another knotty problem related to the *úḷiams* (services to be rendered in temples and at festivals) about which we shall say more later, and yet another to what are usually known as the "temple respects"—that is traditional marks of honour accorded to particular persons such, for example, as the bearing of torches before them, which often led to disputes resulting in civil suits and criminal complaints. It was suggested that these disputes might be decided by taluk panchayats specially created for the purpose. The Darbar had also to decide on what conditions State Institutions should be transferred to private management.

Private persons sometimes asked that the management of certain temples should be transferred to their hands, and this was sometimes done. For instance, the Sri Subramania Svàmi temple at Viràlimalai was for some years under the management of a Chettiyar.

In 1922–23, the Darbar appointed a committee of officials and non-officials with Mr. (now Rao Bahadur) Krishnamachariar, then the Huzur Secretary, as President to examine these

questions in detail and to report on them. The Committee submitted their report in 1925. Their first recommendation was "that at the present stage of the History of the State and her people, it is necessary to maintain the Devastanam and to continue to spend public moneys on it." The Committee considered that the total expenditure on Devastanams, etc., might appropriately be 2/7ths. of the total land revenue of the State, or about 2¾ lakhs of rupees a year but that for the present, about 2 lakhs would be sufficient. The Committee recommended an increase of *Paḍitharam* in 25 major temples (other than the Tirugókarnam temple and the *pújaiviḍu* in the palace which have *sámán dittams*) by 50 per cent to begin with, and for the minor temples, a total increase of about Rs. 4,000 a year. The Committee opined that "it is far better to arrange for the proper conduct of festivals in a few temples than to seek to get them well performed in a large number of them, which will only mean attempting the impossible," and hence only proposed increases for the more important temples which celebrated two festivals a year and had an annual *diṭṭam* of not less than Rs. 150 for festivals.

The Committee did not recommend any drastic reduction in the strength of the establishment of the institutions while they suggested an increase of at least 25 per cent in the pay of the servants of some of the more important ones.

The Committee were not for any enhancement of expenditure on *pararáshṭram kaṭṭaḷais.** Though the Government

* *Pararáshtram kaṭṭaḷais* are 32 in number. *Kaṭṭaḷais* in the following 23 temples have money allotments—1. Arantángi; 2. Ávadayárkovil; 3. Kunnakkudi; 4. Mámundi Ándavankovil; 5. Srirangam; 6. Tiruvánaikovil; 7. Trichinopoly (Táyumánanasvamikovil); 8. Kadambarkovil; 9. Trivadi (Ayan Kattalai); 10. Trivadi (Western Palace Kattalai); 11. Tiruvadaimarudur; 12. Vaidiswarankovil; 13. Chidambaram; 14. Kivalur; 15. Tiruvárur; 16. Mannargudi; 17. Swámimalai; 18. Madura; 19. Palni; 20. Tirupati; 21. Tirupparakkunram; 22. Ramesvaram, and 23. Nerur. Ináms have been granted for the following nine institutions—24 to 27. Feeding at the Kanjappa Mudaliyar and the Mánikka Mudaliyar chatrams at Trichinopoly, and at Ávadayárkovil and Tiruváduturai, 28–29. Watersheds at Tanjore and in the Amman Sannadhi at Tiruvánaikovil, 30. *Nandavanam* or flower-garden at Srirangam, 31. the temple of Ayyanar at Kovilpatti (Marungápuri), and 32. *Sahasranáma archanai* (offering of flowers accompanied by the repetition of the thousand names of the God) at Srirangam.

were ultimately responsible for the proper management of the *minor* institutions under private management, a list of which had been published in 1918, the Committee thought that it was not necessary for them to interfere actively in regard to them except in order to correct mismanagement. The Committee recommended that the village officers should maintain a register specifying in regard to each institution the amount of any Government grant enjoyed by it, the nature of all services to be rendered by members of the public in relation to it, the persons liable to render them, etc.

The Committee recommended the abolition of a number of chatrams. It did not approve the proposal that temples should be supervised by Panchayats, or that disputes regarding "respects" in State temples should be decided by taluk Panchayats. While recommending the retention of the *major úḻiams*, it suggested the abolition of the *minor úḻiams* and the substitution for it of a money cess of 6 pies in the rupee to begin with, and ultimately of 2 annas in the rupee of the assessment of both *Ayan* lands and enfranchised *ináms*.

Lastly, the Committee advised that no stereo-typed conditions should be laid down regarding the transfer of State temples to private management.

The orders of the Darbar (1931).—Having regard to the financial position of the State at the time, the Darbar decided to carry out certain reforms and improvements without increasing the existing allotments, which were much higher than the amount proposed by Mr. Vedantacharlu when the Devastanam and *Ayan* lands, were amalgamated. Where services were no longer rendered, or no longer necessary, the Darbar considered that the establishment should be suitably reduced while, taking care that the "essentials of worship" were retained and improved and "non-essentials and excrescences and unnecessary or undesirable establishments and practices" discontinued and abolished. The conditions in each temple should be considered

before introducing any change.* All the chatrams maintained by the State except the Town chatram were to be closed since they had ceased to be necessary or useful. Subject to these general principles the Darbar approved the recommendations of the Committee.

Uliams.—The nature of úḻiams has already been described in the chapter on "Land Revenue."

The Major *úḻiam* consists of the service to which the landholders are liable, of dragging the cars and *chaprams* (light cars) of the State temples. In a Press Communiqué dated September 17, 1930, the Darbar notified the abolition of this liability, in lieu of which a cess called the "*úḻiam* cess" was to be levied at the rate of one anna per rupee of land revenue assessment by all *ayan* landholders in the State who had been liable to perform the *úḻiam*. The imposition of the cess did not find favour with the majority of the ryots. In the Legislative Council Session held in January 1931, all the non-official members in a body voted for its abolition. Two deputations—one of members of the Legislative Council and the other of the ryots preferred the same request to the Darbar. It was admitted on all hands that the obligation to drag the car was a legal incident of land-holding in the State. The Hindu representatives of the ryots contended that they regarded the service not only as a religious duty but as a privilege, and did not wish it to be replaced by the payment of a cess.

In July 1931, the Darbar decided that the cess should be abolished and the old system of personal service restored. A local non-official committee was appointed for each of the temples to supervise the car festivals, and it was ordered that a sliding scale of fines varying according to the amount of assessment payable by each should be levied on defaulters.

* In his note on the Report of the Devastanam Committee the then Dewan, Rao Saheb G Ganapati Sastriar, recommended among other things the abolition of the services of the *Dévadásis* and the *Chinnamélam* establishment in all temples and the enfranchisement of their *Jívaṉams*. The Government prohibited in 1925 the dedication of minor girls as *dásis*.

Minor úḷiams consist chiefly of furnishing bearers for the idols and their paraphernalia in processions, and supplying kids for sacrifice, cocoanuts for offerings, plaited cocoanut leaves, festoons and green leaves for decorations, making rafts on which the idols are floated round the *teppakuḷam* or temple tank (lit- 'raft-tank.') People neither wish to perform the customary services gratis nor consent to their discontinuance.

Default of these customary services is visited with a fine amounting to twice the actual cost of getting them performed. The arrears of such fines are known as *vasakkaṭṭu* arrears. Before fasli 1321, the Devastanam accounts were maintained in the Taluk offices, and Devastanam funds were freely advanced to hire labourers to perform the services when necessary. Since fasli 1324, the Dewan Peishkar has been provided with funds from which to incur expenditure for the performance of the services which should be recouped by fines levied on the defaulters. Such advances have not been promptly recovered in the past. The *vasakkaṭṭu* arrears outstanding on the last day of June 1937 amounted to Rs. 9,982. Nowadays, however, no expenditure of this sort is incurred except for a few important temples: if the services are not performed gratis by those responsible they are not performed at all.*

Appointment of a Special Officer: Reconsideration of the 1931 orders and issue of fresh orders in 1935.—To give effect to the orders that they had passed in 1931 on the recommendations of the Devastanam committee, the Darbar appointed a Special officer to report in respect of each temple whether the *paḍitharam* should be revised, or the establishment reduced, and on other points raised by the committee. After a careful consideration of the Special Officer's detailed report on the Tiruvéngaivàsal temple, and the Dewan Peishkar's recommendation in respect to it, the Darbar came to the conclusion that the effect of the instructions issued in 1931 would be to

* But major úḷiams are enforceable and the penalty for default can legally be collected, since their performance is expressly stipulated in the *cowles* issued to landholders where the *amáni* was converted into *kaḍamai* tenure.

introduce drastic changes, such as ought not to be made by a minority Administration. They, therefore, directed that the essential services in temples should not be modified, that neither the number of daily pujas nor the quantity of food cooked or distributed should be reduced, that no posts that were not manifestly superfluous should be abolished, and that *Sámán diṭṭams* (See page 464) where they existed, and the *Dévadási* service where it was still rendered should not be abolished. The Special Officer was directed to confine himself to reporting briefly what the staff and the expenditure on *paḍitharams* in each temple were when the amalgamation of the Devastanam with the Ayan took place, and what they were at the time of reporting respectively, to give a detailed explanation of any variations, and to make such suggestions as might be practicable to effect economy and eliminate waste.

The 1931 decision on the question of *major úḷiams* was confirmed. Regarding *minor úḷiams*, it was ordered that where supplies were made gratuitously and not as consideration for the enjoyment of service ináms, they should be optional. Personal services such as bearing the deities were to be regarded as burdens attaching to the land. Landholders were to be regarded as under an obligation to render such services when the accounts maintained in the temples concerned showed that they were liable to do so. Non-pattadars were exempted from such obligation. Any pattadar who was disqualified by caste or religion from rendering personal service, was permitted to compound his liability by payment of a cess at a rate not exceeding one anna in the rupee of his assessment. Persons holding *Sarvamányam* (*Brahmadáyam*) lands were not to be regarded as exempt from the liability unless they could show that for a long time they had not been rendering the service. Persons holding enfranchised inams other than *Brahmadáyam* lands were declared to be exempt. The Special Officer was directed to examine the temple records and determine who was liable to service on these principles.

The estimated cost of this investigation exceeded Rs. 5,000 a year. In November 1935, the Legislative Council passed a resolution recommending that the investigation should be discontinued. In view of the extreme financial stringency due to the severe drought, the Darbar accepted this recommendation, and in December 1935, suspended the inquiry indefinitely.

The working of the department at present.—The department at present controls 889 institutions in the State and 32 outside it. The institutions in the State may be classified as follows:—

1.	Institutions under the direct control and management of the State and maintained entirely at State cost.	100 (90 of these are temples.)
2.	State institutions handed over to private persons for management.	8 (all temples.)
3.	Institutions under private management receiving State grants in money with or without *mányam* lands.	99 (all temples.)
4.	Institutions under private management enjoying *mányams*.	682 (623 of them are temples.)
5.	Institutions under private management and under no obligation to render accounts to the Government.	59 (18 of them are temples.)
6.	Private institutions taken over for State management at the request of the founders.	1 (templo.)
7.	Institutions managed by private persons and maintained from private endowments.	196 (105 of them are temples.)

The State has the right to enforce the proper maintenance of institutions under private management, under the Charitable Endowments Regulation of 1912.

The Dewan Peishkar is ex-officio trustee in respect of all funds belonging to private endowments that have been taken under State management, the total of which amounted on June 30, 1937, to approximately Rs. 2,33,600.

There are besides 32 *Pararáshṭram kaṭṭaḷais* (see page 466). The Hindu Religious Endowment Board of Madras claimed control of one of the *Pararáshṭram* institutions—the Sri Kàsi Visvanàtha Svàmi temple together with the *Adhisṭánam* of Sri Sadàśiva Brahméndra at Nerur (Trichinopoly district), but after enquiry exempted it from the operation of the Hindu Religious Endowment Act. This institution is under the full control of the State.

Administration.—The Dewan Peishkar is the head of the department of Devastanams and Charities. His Personal Assistant is in immediate charge of it under his control, and in turn supervises the work of the Tahsildars and Revenue Inspectors. The ordinary village temples are looked after by the vattam moniams. Important temples such as the Tirugókarnam temple, Sri Dakshinàmúrti temple in the Palace, the Śàndàrkoil together with the Town chatram, and the temples at Tirumayam, Neḍungudi, Péraiyúr, Tirukkalambúr, Kílanilai, Kudumiàmalai, Kíranur and Viràlimalai are managed by special officers known as Vicharanaigars, Sampratis or Karnams.

Financial.—The revenue of the department during fasli 1346 including the collections on account of Vasakkattu arrears amounted to Rs. 9,468, and the total expenditure to Rs. 1,51,090. The main items of expenditure were as follows:—

		Rs.
1.	Paditharam, and establishment	1,14,111
2.	Pátrams (Vessels) and Parivattams ...	4.388
3.	Tiruppani (repairs)	19,591
4.	Dassara	19,590

Dassara.—The Dassara is perhaps the most important festival conducted in the State. It was instituted by Ràja Vijaya Raghunatha Tondaiman (1730–69) under the direction of his preceptor Góp‌àlakrishna Sastriyàr to secure for himself expiation of past sins, and for the State continued prosperity. (See Chapter III—'The People' page 93, and Chapter X—'Education,' page 285).

The Poor Home.—No account of the charities in the State would be complete if it did not mention the Vijaya Raghunàtha Poor Home. Immediately after he became Regent in 1922, the late Ràjakumar Vijaya Raghunàtha Durai Ràja called on Heads of Departments to submit proposals for the institution of a Home to afford relief to the neglected orphans, the helpless, the infirm and the poor of the State by providing them with food, clothing and lodging. After consideration of their suggestions, a scheme was drafted and published in 1925. On March 27, 1925, a public meeting was held in the Darbar Hall presided over by the Dewan, Rao Bahadur P. K. Kunhunni Menon, to consider the draft. It was resolved at this meeting to start a Poor Home at Pudukkóttai and to appoint a Committee to collect subscriptions. By 1928, nearly a lakh of rupees had been collected, most of which was subscribed by Nàttukkóttai Nagarathars, among whom the late Dewan Bahadur Dharma-bhushanam T. N. Muthiah Chettiar of Ràmachandrapuram individually contributed Rs. 20,000.

The Home was opened on March 5, 1928, by Mr. C .W. E. Cotton, C.I.E., the first Agent to the Governor-General for Madras States and is housed in a State Bungalow which was formerly used as a guest house and had once the distinction of accommodating Lord Wenlock, Governor of Madras.

The Home has two sections—the infirmary and the orphanage. In 1928 there were 14 orphans on the rolls and 16 inmates in the infirmary. In 1937, the strength was 86 orphans and 5 inmates in the infirmary. The boys and girls in the orphanage are educated free in the State schools. Some are also trained in carpentry, motor mechanics and tailoring. The girls are taught needle-work. In 1930–31, a poultry was started. The poultry farm and apiary are now flourishing.

At a public meeting held on February 8, 1935, in the Town Hall to concert measures to celebrate the Silver Jubilee of Their Imperial Majesties King George V and Queen Mary it

was resolved that the subscriptions collected to commemorate the occasion, excluding any sums ear-marked for payment to the Central Fund, the amount spent on feeding the poor and similar objects on the Silver Jubilee day and the expenses of collection, should be used to augment the endowment of the Vijaya Raghunàtha Poor Home. The response to the appeal of the Committee was astonishing and a matter for legitimate pride, especially when it is remembered that to say nothing of the general economic depression, the season 1934-35 was one of the worst on record. More than Rs. 91,000 was collected including the Darbar's contribution of Rs. 10,000 out of which approximately Rs. 76,000 was added to the funds of the Poor Home.

The table below shows the financial position of the Home on June 30, 1937.

	Rs.	A.	P.		Rs.	A.	P.
Opening balance ...	1,76,353	2	9	Expenditure ...	10,740	3	4
Donations and other receipts.	1,862	8	3	Closing balance.	1,75,716	1	11
Interest on donations	8,240	10	3				
Total ...	1,86,456	5	3				

CHAPTER XX.

MILITARY.

The military services that the early Tondaimàns rendered to the Nawab of Arcot and the British East India Company in the 18th century were due to a well-organised feudal system under which it was possible to summon a numerous body of fighting men for instant action. When a call came from the Suzerain, the Ràjà had only to communicate his wishes to his Sardàrs and Sérvaikàrs who forthwith summoned the *Amarakárs* or warriors, and led them to battle.

The army thus marshalled consisted of a combatant branch composed of the Amarakàrs, Sardàrs, and Sérvaikàrs mentioned above, and an equally large body of camp-followers including a commissariat under the supervision of Peishkars and Karnams. A number of men and also women were requisitioned to look after the bullocks that dragged the guns and carried the stores. A grass-cutter accompanied every mounted soldier. There were numerous *Harikárs* who combined the duties of messenger and spy.

The weapons used were the sword and shield, spear, dagger, pike, matchlock, sling, bow and *vaḷari*;* and the fighting men were grouped according to their arms.

The forces that the Tondaimàns were thus able to collect for the use of their allies were certainly not to be despised either in numbers or in fighting quality. According to old Inam office records they sometimes amounted to 8,000 men; but the figures probably included camp followers also. 3,000 men were actually sent out in 1752; and 1,500 horse in 1757. In 1795 the Nawab conferred on Ràja Vijaya Raghunàtha a *mansab* † of 1,500

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* *Vaḷari* is a short crescent-shaped weapon, made of iron, of which one end is heavier than the other, and the outer edge is sharpened. It is held by the lighter end and hurled at the enemy. A similar missile but made of hard-grained wood is *Vaḷai-taḍi*. These are the peculiar weapons of the Kallars and Maravars; and in Marava families, they are presented to the bridegroom as part of the wedding dowry.

† *Mansab* was a military title and rank (instituted by the Moghuls) 'regulated by the supposed number of horse the holder of the title could, if required, bring into the field.' (Wilson.)

horse. It would therefore be fairly accurate to say that the Tondaimàns were able in the 18th century to put into the field an army of 1,500 horse and 3,000 infantry.

It is unnecessary to speak here of the efficiency of this army, which will be sufficiently evident from the events chronicled in the chapter on the history of the State. It is enough to say that in those times when personal bravery and skill counted for much more than they do now, the fighting men of Pudukkóttai proved themselves a match for the armies of Tanjore, Trichinopoly and Madura and helped to overthrow dynasties, and establish two great Powers in Southern India—first the Nawab, and afterwards the British.

After the cessation of the Carnatic wars at the beginning of the 19th century, the fighting qualities of the men deteriorated owing to inaction. There was still a Military Department composed of the ancient irregular militia, and a Battalion of regulars. But since the men had no work to do they were employed to watch the *amáni* crops (See Chapter XIII, page 343). The Regulars were ill-clothed and ill-dressed, and were not subjected to proper drill and discipline. By about 1875 the militia had seriously deteriorated, for in that year when an endeavour was made to organise some of them as State Police, there was hardly a man fit for the service. With the enfranchisement of service inams in 1888, feudal ties were snapped, and the militia ceased to exist as a fighting unit.

The Regulars who were still maintained were better equipped and provided for than before. They consisted of a Bodyguard of 19 cavalry and 110 infantry including five commissioned and 17 non-commissioned officers— all Indians. The infantry were employed to guard the Palace, the Treasury, and the quarters of the State Superintendent and the Dewan. The cavalry were used to escort His Highness the Raja, the Political Agent, during his visits, and the Administrative officers on ceremonial occasions.

As a sequel to the riot that occurred in the capital town on July 15, 1931, a scheme for the reorganisation of the force was drawn up by Mr. Hume of the Madras Police whose services had been placed at the disposal of the Darbar for the purpose. In the course of the re-organisation, it was found necessary to replace a considerable number of the old officers and men as incompetent. The infantry are now divided into two classes,— "A" consisting of men of superior physique trained on the lines of the Armed Police Reserve and intended to function as an additional striking force in emergencies; and "B" consisting of men of inferior physique who furnish the routine guards and ordinary ceremonial escorts. The pay of all ranks of the "A" class is higher than that of the "B" class.

In fasli 1342, the "Hume lines", for the "A" class military force, were built, so that the men might be kept under regular and constant discipline and be ready for immediate mobilisation in case of need. An armoury and magazine, and quarters for the non-commissioned officers were also built. Part of the P. W. D. buildings has been remodelled to serve as the headquarters of the military officers. In all about Rs. 21,000 was spent on buildings.

The infantry was rearmed in fasli 1341 with 410 muskets in place of their old and ineffective muzzle loaders. The sanctioned strength of the military force is 19 cavalry (Bodyguard) and 110 infantry. Nine posts in the cavalry and 13 in the infantry are at present vacant as a measure of economy. The force is under the supervision of the European Sergeant-Major of the Police Armed Reserve.

The State Band (See Chapter XVII, "Palace Establishment," page 452) consists of 27 men including the Indian commissioned officer and non-commissioned officers.

The ***Subahdár's*** place in His Highness's Bodyguard which had long been vacant was filled in 1935–36 by the appointment of an ex-***Jemadar*** of the Q. V. O. Sappers and Miners. The head of the State Military force was formerly called Fouzdàr, then Risàldàr and later Commandant. He is now styled "Officer in charge of the Military Forces", and the post is held by the Superintendent of Police ex-officio.

Strength of the military forces in fasli 1346.

No.	Arms of service.	Number of fighting officers and men.						Details of Force at the end of fasli 1346.						Remarks.
		At the end of Fasli 1345.	Fasli 1346—Recruited.	Casualties.			At the end of Fasli 1346.	Number of Regiments Battalions or Batteries.	Number of guns.	Number of men.				
				Died.	Invalid or retired.	Discharged, deserted, etc.				European Commissioned officers.	Indian Commissioned officers.	Non-commissioned officers.	Fighting men.	
1	Cavalry	10	...	...	...	...	*10	...	...	...	1	1	8	A private and a non-commissioned officer serve as gunners.
2	Sappers	...	...	...	...	...	...	...	...	...	...	...	...	
3	Artillery	...	...	...	...	...	...	...	10	...	...	...	...	
4	Infantry	97	1	1	...	2	†95	...	...	...	3	14	78	
5	Imperial Service troopers ...	...	...	...	...	...	...	...	...	...	...	...	...	
6	Band	25	2	...	...	...	27	...	...	...	1	4	22	
	Total ...	132	3	1	...	2	132	...	10	...	5	19	108	

* 9 places vacant. † 15 places vacant.

The total cost on account of pay and allowances, etc., of the Force in fasli 1346 was Rs. 40,244. (Military Rs. 32,575 and Band Rs. 7,669).

CHAPTER XXI.

FINANCE.

The earliest document that throws any light on the finances of the State at the beginning of the 19th century is the report dated 31st December 1808, submitted by Major Blackburne to the Madras Government. According to it, the Income and Expenditure for fasli 1217 (1807-8) were as follows:—

Total Revenue in star pagodas	55,695
Disbursements, charges of collection, Palace expenses, feasts, etc.	34,125
Paid to creditors' servants (waiting at Pudukkóttai).	324
Paid to creditors according to their receipts ...	16,195
Balance realizable	5,050

(One star pagoda = Rs. 3—8—0).

"With the exception of informers, no checks existed in the Revenue Department. No double set of accounts as in Tanjore and the Carnatic; no curnams; no regular cutcherries in the District with officers appointed by Government; no regular dufter in the capital; no office anywhere in which the accounts of the country were recorded. The Revenue Divisions of the country seldom continued the same two years together. As caprice or interest dictated, portions of land separated from one division were added to another. .... I attribute the general poverty of the country which is very great and striking chiefly to the Amàni system." These remarks of Major Blackburne explain why the finances of the country were very low in the beginning of the 19th century.

Seventeen years later in fasli 1234 (1824-25) conditions had not materially improved. The following is a statement of Receipts and Disbursements for the fasli :—

" *Receipts.*

	Star pagodas.
" By cash received from the Taluks	40,655
From Pannai villages (those cultivated at Sirkar cost).	4,619
From customs	3,635
From Jághír villages	376
From Arrack rent	2,730
	52,015
Profit in exchange of money	4,829
Borrowed from merchants	2,075
Received in advance from renters	2,044
Grand Total ...	60,963

" *Disbursements.*

" Taluk establishments (Tahsildars, Peishkars, etc.)...	4,828
For Dussara feast expense	2,692
Pay for Sirkar servants	15,855
For Sirkar expenses	8,277
For Horse stable and Elephant expenses ...	6,335
For Ináms or Presents	3,097
For extra expenses including Marámut and Buildings.	11,888
For debt	3,200
Grand Total ...	56,172

" At the end of the fasli " different articles such as grains and stuffs " to the estimated value of 2,750 star pagodas remained with the custc [illegible]ers to be disposed of."

From the statement for the year Vijaya (1826-27), we learn that 26,700 vélis (12,500 wet and 14,200 dry) of land were under cultivation, the income of the State was Rs. 1,68,920, and the expenditure Rs. 1,68,920 leaving no balance or deficit—

a remarkable coincidence!. But by the end of fasli 1349 (1839-40), the area under cultivation had increased to about 55,000 vélis, (of which only 18,000 were under the direct management of the Sirkar); and the revenue to Rs. 2,18,751. The details of income and expenditure relating to that fasli are as follows:—

Receipts.

	Rs.
Land Revenue	1,45,943
By Taxes on Jágírs and Amarams, Sró́triams and by loan and Mohturpha tax.	30,401
Income from land customs, salt, Abkari, Jungles and Monopoly for digging and smelting iron.	42,181
Sundry receipts	226
	2,18,751

Disbursements.

For Palace expenses	53,161
Salary of establishment	83,551
For buildings, tank repairs and marámut ...	7,143
Palace funeral expenses	11,726
For interest on account of Sirkar debts ...	4,582
Do. Rájamahál debts ...	7,978
For purchase of jewels, horses, band instruments, etc.	11,292
For advance for indigo works	3,210
	1,82,643

The 'Sirkàr debt' was the result of the severe famine of 1836, when the State had to borrow about Rs. 50,000. The Ràjamahàl (lit. King's palace) accounts related to the Raja's personal expenses, and in 1839, the year in which Ràja Raghunàtha Tondaimàn died, they showed a debt of Rs. 1,34,166. The Raja had set apart certain Sirkar and Manóvarti villages, and the revenues from the Sàyer (land customs) and Salt for the gradual liquidation of his debts. When Raja Ràmachandra Tondaimàn Bahadúr ascended the *gádi*, the State was heavily indebted; but during his minority, the Resident, Mr. Bayley,

curtailed expenditure and improved the financial position of the State. In 1846, Mr. Blackburne reported to the Madras Government that Rs. 1,00,000 had been invested in the Company's paper.

By way of digression, it may be observed here that in 1858 the system of keeping accounts in Maràthi, long prevalent in the State, was abolished, and in 1864, English figures were substituted in the accounts for Tamil figures

The Raja, however, again ran into debt, and by 1856 his debts amounted to 5½ lakhs of rupees. To mark their displeasure the Supreme Government deprived the Raja, of the title of "His Excellency."

Such was the state of Pudukkottai finance when Sir Sashiah Sàstriar assumed office as Sirkíl (Dewan). In fasli 1288 (1878-79), the first year of his administration, the land revenue was less than 2½ lakhs, but in fasli 1304 (1894-95), in which year he vacated office, it was 4½ lakhs. The increase was due to the amàni settlement, the enfranchisement of inàms and the resumption of the Western Palace Jàgír (see pages 346–355) which together brought in an additional annual income of about 1½ lakhs. But for the remission of special taxes on garden lands and on trees on patta lands and the reduction in the amàni rates ordered by the Dewan Regent in 1892 (see page 355), the increase would have been much higher.

In 1887, Sir Sashiah suppressed the manufacture of earth-salt in the State and negotiated with the Madras Government for the grant to the State of an annual compensation of Rs. 38,000. In 1890 he reformed the Excise Department, abolished private stills and arranged for the manufacture of country liquor in a central distillery at the capital, from which it was issued on payment of cash price and still-head duty. The revenue from Excise which was about Rs. 20,000 in 1886 went up to nearly Rs. 56,000 in 1894-95 as the result of this reform. As a result of Sir Sashiah's casuarina plantations the revenue under Forests which had formerly been no more than

Rs. 140, rose to between Rs. 15,000 and 20,000 during the last three years of his administration. He also created a new source of revenue from stone-quarries.

By practising the utmost economy Sir Sashiah was able to lay by a surplus every year and to report in 1883-84 that "for the first time in the history of Pudukkottai, there was no room in the Treasury for the money that had accumulated. I thought it advisable rather than so much money should be idle, to invest some of the surplus in Government securities not only as a source of profit but generally as an insurance fund against future years of adversity." There was in that year a surplus of over nine lakhs. Out of this five lakhs were invested in Government securities. The annual surpluses were utilised in public works and works of a reproductive character. He constructed a number of public buildings which are in the words of Sir Henry Bliss, "permanent memorials of Sashiah Sastri's tenure of power." Town improvement, the repair of irrigation sources (the Kavinàd tank in particular), sanitation, improvements to drinking water tanks and the construction of the Pudukkulam and the laying out of metalled roads are among the major items of expenditure taken up during Sir Sashiah's administration.

The vexed question of the Ràjamahàl debts was also solved. Sir Sashiah sold certain State jewels that had long been lying with Messrs. P. Orr & Sons, and utilised the proceeds to make a last pro-rata payment to the Raja's creditors.

The financial results of Sir Sashiah's administration cannot be better described than in the words employed by Lord Wenlock, the then Governor of Madras, when installing the late Raja—"The inheritance upon which you are this day entering was twenty years ago financially and in every other respect in a dilapidated condition. The aspect of affairs is now very different; you will have made over to you a State not only unencumbered with debt but possessing a balance of between two and three lakhs. The result of his (Sir Sashiah's) labours has been so successful that what was at the time of his accession to office almost a wreck is at the present moment a prosperous possession."

The next Dewan, Mr. Vedantacharlu, was in sole charge of the administration for about three years (1894-98), and during 1898 shared his authority with a Councillor. The completion of the Brahmadàyam settlement and the amalgamation of the Devastanam lands with Ayan, resulted in an increase in land revenue. During this time, the privy purse of His Highness the Raja was raised from Rs. 72,000 to Rs. 1,00,000 per annum. There was "laxity of control over the finances" during this period.*

Before he sailed for Europe in 1898, the late Raja formed a Council of Administration consisting of the Dewan and a councillor. In 1899 Mr. Venkataramadas Naidu became Dewan. Ràjakumar Vijaya Raghunàtha Dorai Ràja was the Councillor. This administration rectified the irregularities of the previous administration. There was a fund, known as the *amánut*, composed of all sorts of miscellaneous receipts not brought to the general accounts from which the Dewan could make disbursements irrespective of any budgetary provision. The Council of Administration closed this fund, and reorganised the Treasury department and placed a special officer in charge of it. They effected some retrenchment and also created a few additional sources of revenue,—in 1900, toll-gates were established, and in 1905 stamp papers were introduced. Expenditure on Irrigation and Agriculture was increased. In 1909 the general revenue rose to nearly 16 lakhs, and the surplus was about 16 lakhs.

From 1909 till 1922, the Administrative Council consisted of three members—a member of the Indian Civil Service as Superintendent of the State and President of the Council, a Dewan and an ex-officio Councillor (the Chief Judge). The first Superintendent was Mr. (now Sir Geoffrey) Bracken (1909-13), and the Dewan, the late Ràjakumàr Vijaya Raghunàtha Dorai Ràja. To them goes the credit of completing the Settlement scheme and making an equitable readjustment of the

* S. Radhakrishna Aiyar: General History—Page 459.

increase of land assessment (see pages 359–368). Sir Geoffrey Bracken held a special jamàbandi to clear off the arrears of 5½ lakhs, caused by suspensions of collection. He collected the arrears in full where possible, and granted remission where necessary (see page 369). The jamàbandi became an annual institution. The increase of land revenue after 1912 is largely due to resettlement, the survey, and the tax on nathams (see page 372), and the resumption of the manóvarti jàgir. Mr. Gwynn, the next Superintendent, (1913–16) systematised the village and taluk accounts. Both Mr. Gwynn and his successor, Mr. Sidney Burn (1916–22), augmented the land revenue by the income derived from the sale and redemption price of house sites in Chetty nathams, and from the assignment of waste lands (see page 374). The land revenue in fasli 1331 exceeded 10¼ lakhs. During the Silver Jubilee of His late Highness in 1913, the tax levied on bangle makers and dhobies' earth was remitted permanently, and the *Kanakku vari* (village karnam's cess) amounting to Rs. 25,000, and house-tax commonly known as *Mohturpha* amounting to Rs. 5,000 were remitted for a period of three years. The *kanakkuvari* was permanently remitted in 1915.

The opening of a distillery for the manufacture of arrack in the Town, and the enhancement of the taxes on cocoanut, palmyra and date trees resulted in an increase of about 3 lakhs in Excise revenue from fasli 1331 (1921–22). Improvements effected in the forests, especially by way of opening new plantations, yielded an enhanced revenue of a little over ¾ lakh by fasli 1331.

The expenditure however also increased from about 14 lakhs in fasli 1319 to 24½ lakhs in fasli 1331. Expenditure on Education and Medical services trebled during the same period. There was an increase under Irrigation and Public Works also. Salaries of officers of all grades in all departments were raised in 1920.

Between 1915 and 1919 a sum of more than two lakhs was contributed to the different War-funds, in addition to a periodical contribution to the maintenance of the Hospital Ship "Madras." The extensions to the Trichinopoly Palace and the erection of the New Palace at the capital involved heavy expenditure. Yet in spite of all these, the surplus at the beginning of fasli 1331 amounted to about 40 lakhs.

In 1922, the late Ràja decided to reside permanently in Europe and delegated his powers and prerogatives to his brother Ràjakumar Vijaya Raghunàtha Dorai Ràja who became head of the administration with the title of Regent (1922–29). Assisted by Rao Bahadur P. K. Kunhunni Menon, as Dewan, he pursued a policy of retrenchment. Fasli 1331 showed a deficit of 3·53 lakhs, but fasli 1332, in which a deficit was anticipated, closed with a small surplus. Years of drought followed necessitating the postponement of collection of land revenue and partial remission. The land revenue was only about 6½ lakhs in fasli 1336 (1926–27), and 5½ lakhs in fasli 1337. In fasli 1338 (1928–29) however, as the result of the collection of arrears, the figure went up to 11 lakhs. Excise and Stamps contributed more than 3 lakhs each; Forest, between Rs. 57,000 and Rs. 88,000; Registration, about Rs. 40,000; and Civil works showed a steady improvement from a lakh in fasli 1333 to two lakhs in 1338.

Irrigation and Public Works accounted for a large proportion of the expenditure since relief works had to be started during the years of drought. An extraordinary item was the grant to His late Highness of Rs. 22 lakhs; and this heavily depleted the State balance. The general revenue of the State stood at Rs. 20,47,369 in the year when the Regency terminated.

A Council of Administration with a President, a Dewan and an Ex-officio Councillor succeeded the Regency. Dewan Bahadur Raghaviah Pantulu assisted at first by Rao Saheb Ganapati Sastriar and later by Rao Bahadur E. K. Govindan as Dewan paid much attention to Development the expenditure on which rose steadily.

The riots in the Town in July 1931, and the serious organized dacoities at Kannangudi and Andakkulam in the same year led to an increase under 'Law, Justice and Police' (the expenditure under this head was Rs. 3,48,743 in fasli 1341, and Rs. 3,16,295 in fasli 1342).

The Council of Administration was terminated in November 1931 when Mr. B. G. Holdsworth, I. C. S., an officer lent by the Government of Madras was appointed Administrator. He held that office till January 3, 1934. Mr. (now Rao Bahadur, R. Krishnamachariar, the Dewan Peishkar, was appointed Assistant Administrator to exercise such powers as might be delegated to him from time to time by the Administrator. During this administration some bridges and an important causeway were built (see pages 238-239). Mr. Holdsworth practically reconstructed the Valnàd anicut, now known as the 'Holdsworth anicut,' across the Vellàr near Kadayakudi.

In January 1934, he was succeeded by Sir A. Tottenham (I. C. S., Retd.). In faslis 1343-45 the State had to face a heavy fall in the receipts accompanied by an enormous rise in the expenditure. The receipts under *Interest* fell owing to reduction of interest on the fixed deposits with the Imperial Bank of India. In honour of the visit in 1933 of His Excellency the Viceroy to the State, the Darbar cancelled all interest on outstanding agricultural loans. In fasli 1343 the season was not favourable and the Darbar suspended the collection of 50 per cent of the kist due on the lands which had practically failed owing to the non-supply of water, in accordance with the principles laid down during the Revenue Settlement. In fasli 1344, the State experienced perhaps the severest drought on record followed by a wide-spread absence or failure of crops and a real drinking-water famine affecting both men and cattle. Sir A. Tottenham granted remissions of land revenue on a scale as unprecedented as the situation that had made them necessary. He ordered a remission of half the revenue on wet lands that owing to shortage

of water had either been left uncultivated, or if cultivated, had failed to yield at least a four anna crop. The number of kists was increased from 4 to 6. A moratorium of one year was declared for the repayment of State agricultural loans. The tree-tapping license fees were temporarily reduced, and 50 per cent of the rent due under green-leaf leases was remitted.

There was no "famine," and it was not found necessary to open any free kitchens. What was necessary was to enable the agricultural labourers to earn money for their subsistence. Relief works were therefore started. These mainly took the form of repairs to tanks. In all Rs. 3,63,672 were spent on Relief works during the faslis 1344—46. About 4½ lakhs of units of work were provided (a 'unit' being one day's labour of a man, a woman or a minor of either sex).

The revenue for fasli 1344 fell to Rs. 16,65,929, while the expenditure rose to Rs. 23,79,326 in fasli 1344, and stood at Rs. 23,01,456 in fasli 1345. The combined deficit of faslis 1344 and 1345 was Rs. 9,35,702. In his opening speech at the April–May 1935 session of the Legislative Council, Sir A. Tottenham, the President, warned the members that the Darbar would have to follow a policy of retrenchment in order to recoup the reserves that had been so seriously depleted. As a gesture towards this, there was a cut in official salaries till the end of June 1937. It will be necessary for some years to restrict expenditure as far as possible to what is essential, and no ambitious new schemes of any kind can be undertaken. However the Darbar have not stinted expenditure on the Education and Medical departments as the figures in the tables below evidence.

Conclusion.–*Receipts* –The total revenue of the State which was a little over 3¼ lakhs in fasli 1288 (1878-79) rose to 11 lakhs in 1308 (1898-99), and to 20 lakhs in 1327 (1917-18). It has not since fallen below 20 lakhs except in faslis 1336 (1926–27), 1337 (1927-28) and 1344 (1934-35), when, owing to drought, large remissions had to be granted. The present average revenue may be safely taken as 21 lakhs. The present normal Land Revenue

demand is 9½ lakhs. Extra receipts under sale of house-sites, redemption prices, etc., in Chetty villages amount on an average to ½ lakh. Thus the average total demand under Land Revenue is about ten lakhs, or about half the total revenue.

Next in importance is the Revenue from Abkari which since fasli 1328 has averaged about three lakhs. The quantity of liquor issued which in the period 1900—1909 ranged between 13,000 and 15,000 gallons, fell to less than 8,000 gallons in 1925 and to about 6,000 gallons in 1935-36. There has been a corresponding fall in the quantity of toddy consumed; and of late there has been a considerable fall in the rentals of toddy and liquor shops. The Excise duty on matches is a welcome new source of revenue yielding about Rs. 35,000 annually.

The next important head is Civil Works, Tolls, Motor licenses, etc., yielding annually two lakhs. 'Stamps' have yielded a revenue of about three lakhs for the past 12 years.

Between faslis 1322 (1912-13) and 1340 (1930-31) the revenue under 'Forests' ranged between Rs. 67,000 and Rs. 90,000. It has since fallen. In fasli 1344 it was about Rs. 35,000 and in fasli 1345, about Rs. 37,000. The demand for firewood at the Government fuel depôt has decreased owing apparently to private competition with the result that Government have been obliged to reduce the price of casuariana and jungle wood, and the bids at the auctions of the green-leaf leases have not been very encouraging of late. The general economic depression is apparently responsible for the fall in the number and value of documents registered and hence for the lower revenue under 'Registration.'

Expenditure.—'Religion and Charity': When the Devastanam lands were amalgamated with Ayan, an annual allotment of Rs. 1,18,000 was fixed for the Assignments to Religious and Charitable Institutions, but the figure is freely exceeded year after year. The expenditure under 'Palace' which was over three lakhs before fasli 1338 has now fallen to a little above two lakhs.

'Education' which accounted for an expenditure of about Rs. 13,000 fifty years ago now claims nearly Rs. 2,70,000. This enormous increase is due to the maintenance and growth of a Second Grade College, to the development of Secondary education both in the Town and in the mofussil, to the expansion of primary education consequent on the introduction first of free education and later of a progressive scheme of compulsory education, and to the liberal scheme of State aid to deserving pupils of the backward communities. The expenditure under 'Medical' which was about Rs. 7,000 fifty years ago is now about Rs. 1,20,000, and the increase reflects the development of the Town Hospital into an up to date one provided with all the facilities and equipment including bacteriological, dental and X-ray sections, and of the Rani's dispensary into a Hospital, the increase in the number of rural dispensaries and the opening of an Ayurvedic dispensary in the capital.

The variations in the other service heads do not call for detailed examination.

Statistics.—***Financial Statement for fasli 1346.***

I. Receipts for fasli 1346.

Main Heads :—

	Rs.
Land Revenue	9,48,027
Salt and Excise	3,23,289
Stamps	3,30,000
Forest	38,500
Registration	32,200
Interest	89,700
Civil Works	2,26,500
Other receipts	1,20,400
Total ...	21,25,750

Expenditure for fasli 1346.

	Rs.
Religion and Charity	1,53,880
Palace	2,15,433
Land Revenue	1,89,384
Salt and Excise	21,126
Registration	27,172
Forest	18,875
General Administration	81,261
Law and Justice and Police	2,69,488
Education	2,60,900
Medical and Vaccine	1,24,595
Political	6,259
Superannuation	1,03,654
Stationery and Printing	42,349
Contribution to Municipality and Unions ...	32,524
Irrigation	72,801
Civil Works	2,93,644
Military and Band	39,152
Other Expenditure	3,20,208
Total ...	20,69,810

Balances (1346).

		Rs.
	Revenue	21,25,750
	Expenditure	20,69,750
	Surplus	55,940
	Opening balance...	15,90,387
		16,46,327
(1)	Closing balance	13,03,494
(2)	Cash assets, net	3,42,833
		16,46,327

(1) The balance of Rs. 13,03,494 together with Rs. 6,29,216 being the balance at the credit of the State Provident Fund on the last day of the fasli and other sums derived from other deposits was invested as follows:—

(i) Rs. 22,80,900 in Government Securities.

(ii) Rs. 22,000 in shares in the Pudukkoṭṭai Electric Supply Corporation.

(iii) Rs. 500 in Reserve Bank shares.

(iv) Rs. 2,000 in shares in the Pudukkottai Match Factory.

The total amount to the credit of individual religious and charitable institutions under the control of the State is Rs. 2,33,626 of which Rs. 2,860 is included in the State general treasury balance and the rest is invested in the names of the institutions themselves in the Post office Savings Bank and Cash Certificates, in Co-operative Societies in the State, in 3½ per cent and 4 per cent Government Promissory Notes and Stock Certificates and in 4 per cent War Loan.

(2) The sum of Rs. 3,42,833 represented the cash balance in the State Treasuries and in the Darbar's current accounts with the Imperial Bank of India, and the National Provincial Bank, London.

II Statement showing the gross Receipts and Expenditure of the State from faslis 1288 to 1346.

Fasli.	Receipts.	Expenditure.	Difference + surplus − deficit.	Closing balance.
1288	3,34,910	3,12,375	+ 22,535	90,524
1289	3,42,377	3,77,901	− 35,524	55,000
1290	4,76,480	3,12,089	+ 1,64,391	2,19,391
1291	5,18,851	4,08,452	+ 1,10,399	3,29,790
1292	5,01,407	3,75,335	+ 1,26,072	4,55,862
1293	4,65,102	4,44,262	+ 20,840	4,76,702
1294	5,46,034	4,64,983	+ 81,051	5,57,753
1295	5,65,864	5,13,127	+ 52,737	6,10,490
1296	6,73,653	4,83,494	+ 90,159	7,00,649
1297	6,09,819	6,29,974	− 20,155	6,80,494
1298	6,99,895	8,85,781	− 1,85,886	4,94,608
1299	7,15,433	7,95,002	− 79,569	4,15,039
1300	7,76,553	7,43,454	+ 33,099	4,48,138
1301	8,47,906	7,76,400	+ 71,506	5,19,644
1302	7,11,613	8,77,476	− 1,65,863	3,78,781*

* Rs. 25,000 in fasli 1302, and Rs. 1,00,000 in fasli 1303 were borrowed from the Manóvarti surplus funds. Rs. 1,00,000 were repaid in fasli 1305.

Fasli.	Receipts.	Expenditure.	Difference + surplus − deficit.	Closing balance.
1303	7,81,125	8,35,238	− 54,113	4,24,668*
1304	6,96,791	7,33,578	− 36,787	3,87,881
1305	8,06,338	8,18,768	− 12,430	2,75,451*
1306	8,14,271	7,97,262	+ 17,009	4,64,376†
1307	9,54,864	10,23,799	− 68,935	4,95,441‡
1308	11,22,258	10,17,535	+ 1,04,723	6,89,377§
1309	10,47,443	8,51,057	+ 1,96,386	8,04.585‖
1310	10,09,273	8,70,332	+ 1,38,941	9,00,527
1311	10,46,891	8,95,156	+ 1,51,735	10,66,221
1312	11,25,877	10,92,804	+ 33,073	11,30,128
1313	11,28,174	11,04,791	+ 23,383	11,75,461
1314	11,23,323	10,75,840	+ 47,483	12,09,230
1315	8,90,955	12,68,994	− 3,78,039	8,23,459
1316	15,49,317	10,76,124	+ 4,73,193	12,69,189
1317	13,22,699	10,74,559	+ 2,48,140	15,17,329
1318	15,63,318	11,57,717	+ 4,05,601	19,22,930
1319	15,21,678	14.12,339	+ 1,09,339	20,32,269
1320	16,23,358	14,04,556	+ 2,18,802	22,51,071
1321	16,70,287	15,62,934	+ 1,07,353	23,58,424
1322	18,48,354	14,07,567	+ 4,40,787	27,99,211
1323	18,15,207	15,56,821	+ 2,58,386	30,57,597
1324	18,31,272	20,49,122	− 2,17,850	28,39,747
1325	18,71,088	18,60,429	+ 10,659	28,50,406
1326	19,05,865	16,93,345	+ 2,12,520	30,62,926
1327	20,03,493	19,73,318	+ 30,175	30,93,101
1328	20,83,697	16,62,557	+ 4,21,140	30,14,241
1329	21,25,431	18,14,330	+ 3,11,101	38,25,342
1330	21,43,203	20,65,938	+ 77,265	39,02,607
1331	21,38,916	24,52,565	− 3,13,649	35,88,958
1332	23,17,155	41,55,201	−18,38,046	17,50,912

* Rs. 25,000 in fasli 1302, and Rs. 1,00,000 in fasli 1303 were borrowed from the Manóvarti surplus funds. Rs. 1,00,000 were repaid in fasli 1305.

† This figure includes Rs. 1,71,916 under 'Devastanam and Charities' incorporated with the State Revenue.

‡ This figure includes Rs. 1,00,000 transferred from the *Amánut* to the State funds.

§ This includes the amount adjusted to State funds from Manóvarti funds.

‖ The figures for faslis 1309–1314 include miscellaneous items under debt heads.

Fasli.	Receipts.	Expenditure.	Difference + surplus − deficit.	Closing balance.
1333	21,23,932	19,29,060	+ 1,94,872	19,45,784
1334	22,60,993	19,43,972	+ 3,17,021	22,62,805
1335	22,78,941	19,99,897	+ 2,79,044	25,41,849
1336	19,04,972	20,23,323	− 1,18,351	24,23,498
1337	17,53,787	22,98,238	− 5,44,451	18,79,049
1338	22,84,046	20,14,960	+ 2,69,086	21,48,133
1339	26,72,657	20,47,369	+ 6,25,288	27,73,421
1340	22,47,736	21,47,953	+ 99,783	28,73,204
1341	21,55,377	24,51,702	− 2,96,325	25,76,879
1342	23,11,472	22,66,288	+ 45,184	26,22,063
1343	20,50,885	21,46,859	− 95,974	25,26,009
1344	16,65,929	23,79,326	− 7,13,397	18,12,692
1345	20,79,151	23,01,456	− 2,22,305	15,90,387
1346	21,25,750	20,69,810	+ 55,940	16,46,327

III Statement showing the Receipts of the State under the principal heads of Revenue: Land Revenue, Excise, Forests and Registration, from faslis 1281 to 1346.

Fasli.	Land Revenue.	Excise.	Forests.	Registration.
1288	2,78,343	5,495	139	10,933
1289	2,89,720	8,645	298	9,882
1290	3,40,466	9,089	541	9,233
1291	3,97,076	11,262	761	9,308
1292	4,15,626	12,970	695	9,292
1293	3,86,878	14,719	638	9,032
1294	4,32,907	19,480	707	8,336
1295	4,46,126	19,462	3,027	12,414
1296	4,52,081	20,531	3,262	14,592
1297	4,51,098	24,393	4,757	13,592
1298	4,57,495	26,187	12,136	15,769
1299	4,80,950	26,972	9,432	17,150
1300	5,51,797	27,730	22,702	19,384
1301	6,02,421	49,132	17,726	22,120
1302	4,58,293	46,479	23,137	26,949

Fasli.	Land Revenue.	Excise.	Forests.	Registration.
1303	5,32,174	42,597	22,169	25,414
1304	4,31,219	55,767	15,828	24,778
1305	5,20,147	54,718	18,048	23,703
1306	5,22,959	62,002	16,004	24,761
1307	6,46,447	59,415	25,343	28,160
1308	7,35,970	56,369	21,157	25,893
1309	6,75,169	57,839	27,698	31,236
1310	6,80,879	57,120	28,093	22,767
1311	7,24,978	57,144	30,751	28,311
1312	7,83,990	72,741	29,782	27,417
1313	7,96,946	83,794	35,243	29,207
1314	5,20,709	97,536	41,895	30,281
1315	4,94,238	96,512	35,283	31,630
1316	11,20,377	1,06,094	34,835	32,452
1317	9,04,178	1,16,637	31,302	36,865
1318	10,28,550	1,27,442	36,055	35,672
1319	9,31,104	1,22,223	45,783	34,726
1320	9,55,915	1,43,540	45,747	31,421
1321	10,43,736	1,66,182	53,177	31,889
1322	9,78,917	2,03,346	67,060	35,926
1323	10,16,315	2,03,875	68,498	34,476
1324	10,20,907	2,05,272	76,037	34,992
1325	10,30,761	2,37,135	73,461	34,069
1326	10,52,101	2,55,458	81,773	33,017
1327	10,35,199	2,60,100	79,630	32,022
1328	10,10,683	3,30,151	90,554	35,633
1329	10,42,189	3,27,576	79,399	37,549
1330	10,11,154	3,40,324	83,766	36,230
1331	10,35,165	2,98,982	76,815	36,921
1332	10,29,787	3,00,278	72,952	38,492
1333	10,31,235	3,23,634	76,160	42,820
1334	10,49,887	3,47,428	86,575	42,719
1335	10,31,663	3,41,273	88,855	43,552
1336	6,63,503	3,35,617	68,568	41,685
1337	5,48,378	3,12,684	77,798	40,860

Fasli.	Land Revenue.	Excise.	Forests.	Registration.
1338	10,96,087	3,33,368	57,501	37,442
1339	14,79,632	3,22,317	76,050	36,515
1340	9,61,893	3,24,420	71,111	34,616
1341	9,76,659	3,17,527	59,733	34,163
1342	9,98,457	3,11,917	54,670	34,287
1343	9,40,814	3,18,190	43,172	33,544
1344	6,24,094	2,94,933	35,546	31,635
1345	10,09,111	2,52,467	37,390	28,486
1346	9,48,027	2,85,289	40,257	31,222

IV Statement showing the Expenditure under the heads "Education" and "Medical" from faslis 1288 to 1346.

Fasli.	Expenditure on Education.	Expenditure on Medical.
	Rs.	Rs.
1288	5,070	5,262
1289	4,758	5,108
1290	4,966	4,978
1291	7,122	4,968
1292	7,860	6,692
1393	9,510	5,805
1294	12,062	7,242
1295	11,594	7,058
1296	13,857	8,201
1297	20,913	9,161
1298	23,711	10,292
1299	23,732	10,384
1300	27,576	10,884
1301	31,602	12,891
1302	32,561	12,821
1303	31,216	18,256
1304	33,084	18,559
1305	41,216	27,476
1306	41,939	23,016
1307	42,330	27,796

Fasli.	Expenditure on Education.	Expenditure on Medical.
	Rs.	Rs.
1308	45,008	22,169
1309	36,392	21,897
1310	36,348	20,407
1311	37,301	31,435
1312	38,073	26,312
1313	39,752	27,265
1314	37,799	27,341
1315	40,520	30,562
1316	39,356	32,140
1317	45,579	27,530
1318	55,608	39,114
1319	59,210	42,474
1320	64,851	41,582
1321	72,547	44,926
1322	68,815	44,650
1323	81,887	30,823
1324	85,821	55,109
1325	92,542	39,900
1326	1,00,927	56,261
1327	1,07,881	58,921
1328	1,12,943	67,818
1329	1,27,794	78,180
1330	1,52,315	94,751
1331	1,80,614	1,24,512
1332	1,80,899	1,09,766
1333	1,73,303	81,049
1334	1,73,408	1,04,961
1335	1,88,000	99,541
1336	1,92,981	98,563
1337	1,99,298	1,09,174
1338	2,06,122	1,05,167
1339	2,16,885	1,12,069
1340	2,43,041	1,00,843
1341	2,66,926	1,06,869
1342	2,54,944	1,05,828
1343	2,49,679	1,05,519
1344	2,63,713	1,08,621
1345	2,68,827	1,21,369
1346	2,60,900	1,24,595

Administrative.—In his report submitted to the Madras Government on December 31, 1808, Major Blackburne remarked that there was "no office anywhere in which the accounts of the country were recorded." He laid down that "all public money should be kept in public Treasuries, from which such sums as might be required should be taken out when necessary." The *Rájamahal* or the Palace Private accounts of which we have an account as early as 1832, continued till they were abolished by Sir Sashia Sàstriar. Mr. Venkataramadas Naidu abolished the *amánut*, a special fund from which the minister incurred expenditure free from Budgetary restrictions, and reorganised the Treasury Department by placing it under the control of a Treasury Officer. The Personal Assistant to the Dewan Peishkar is now the Huzur Treasury Officer. The Taluk Treasuries are under the immediate control of the Tahsildars.

The Audit of the expenditure of the several departments of the State is conducted by the Audit Branch of the Darbar Office and by local test audit of the accounts maintained in the subordinate offices.

CHAPTER XXII.

MUSEUM AND ARCHAEOLOGY.

SECTION I.—THE STATE MUSEUM.

Short History.—The establishment of a State Museum was first mooted in 1896. It was proposed to locate it in the Ananda Bàgh. Nothing was done till 1909, when it was decided that the Museum should be located in the small "Palace" in the Main Street of Tirugókarnam. The Museum was opened in 1910. In that year there were nearly 38,000 visitors to it. The economic section was improved in 1912-13 by the addition of 80 plants collected in the State and identified by Dr. C. A. Barber, Government Botanist, Coimbatore. In 1914-15, it was further enriched by a number of useful exhibits sent by Dr. Henderson, Superintendent, Government Museum, Madras. In 1919-20, the Art and Industries Section was opened with specimens of the products of cottage industries carried on by women in the State, originally collected for the South Indian Exhibition of Women's work held in Madras. In 1923-24, the Archæological Section was considerably improved; and in that year the number of visitors exceeded a lakh. On the last day of fasli 1346 (1936-37), the number of exhibits was nearly 6,800.

The building is unfortunately by no means suitable for its purpose though considerably improved between 1934 and 1937. A new building specially designed for its purpose is a desideratum that the Darbar are prevented by the present condition of their finances from providing.

The different sections—The Museum has eight sections:-

1. *Art and Industries*:—Specimens of the products of almost all the industries carried on in the State are exhibited side by side with specimens from outside the State for com-

parison and study. These include specimens of very attractive baskets of various shapes and sizes made by Nagarathar women from strips of the leaf of the palmyra palm (*Borassus flabellifer*) and wood and ivory carvings, bell-metal ware, and bronze figures of local origin.

2. *Economic Section* :—This contains a large collection of the cereals grown in the State including 69 varieties of paddy. Similar but superior varieties grown elsewhere are also exhibited. There is a good collection of medicinal herbs found in the State. There are also indigenous vegetable fibres, and fibres and basts made in the Museum itself from *Agave americana, Abutilon indicum* and *Calotropis gigantea.* A collection of tan stuffs (in which the State is particularly rich) is exhibited with labels explaining how each is used for tanning and with what results. There are also models of agricultural implements and water lifts.

3. *Natural History* (*including Entomology*) :–The *Mammalian* gallery has not many specimens. Two of the more interesting are an Indian Pangolin (*Manis pentadactyla*), a Porcupine (*Hystrix leucura*) and an articulated skeleton of a deer.

The gallery of birds contains a representative collection of the avi-fauna of the State. The more important and interesting specimens are those of the species of Perchers, Fowls, Ducks and Geese described in pages 37 to 43 of Chapter II.

The Museum had a good collection of live snakes among which were a good sized python and some varieties of the *colubridae.* Under the orders of the Darbar, these collections were sold or presented to other Museums in 1923, and only stuffed specimens and skeletons of reptiles are now exhibited.

The fresh water *fish* found in the State are of genera belonging to the *Siluroids* and the *Cyprinoids.* Specimens of these are exhibited in bottles. There are also a few specimens of big sea fish mounted in cases. The groups *Arachnida, Myriopoda* and *Crustacea* are also represented.

The entomological specimens belong mostly to the families of *Diptera, Lepidoptera* and *Coleoptera.*

4. *Ethnology:*—This section is steadily growing in popularity. It includes a good collection of musical instruments, of arms and armour formerly used by the Sardàrs and Śérvaikàrs of the State, and of votive offerings of different castes, and jewels, especially *tális,* used by women of different castes and tribes.

5. *Numismatics:*—In this section are collections of Roman coins discovered in the State and of those of the Vijayanagar, Àndhra and other South Indian dynasties. Moghul and Bàhmini coins and those of the French, Dutch, and English East India Companies are also represented.

Many of the coins were presented to the Museum by the Bombay Branch of the Royal Asiatic Society, the Madras Government Museum and other institutions.

6. *Archæology:*—This is a very popular section and has expanded considerably within the last few years. Prehistoric burial sites are found in many parts of the State. The dead were buried in large pyriform urns, or in subterranean cells formed of stone-slabs. A number of urn-burials were opened about 1917, and more than 30 megalithic tombs in 1935. 152 specimens of old pottery and 72 iron weapons of different sorts and sizes discovered in the 1917 and 1935 excavations are preserved in the Museum.

37 fragments of wood-work carved with floral designs and human and animal figures which once formed part of the Kalyàṇa maṇṭapam in the old palace are exhibited in the Museum. Among the bronzes mention may be made of the images of Appar, Màṇikkavàcagar, Bikṣàṭanamúrti, Àliṅgana Candraśékharamúrti (Śiva embracing Pàrvati), Sómàskanda and Sukhàsanamúrti. A bronze *relievo* of the 24 Jain Tírthaṅkaras arranged within a *tiruvácika* frame with Ṛṣabhadéva in the centre is of special interest. There are fine images of the Tírthaṅkaras Àdinàtha and Pàrśvanàtha.

The stone gallery contains a number of images of Jain Tírthaṅkaras found in different parts of the State. Among those of Hindu deities, mention may be made of figures of Jyéṣṭàdévi, Bikṣàṭanamúrti, Ardhanàríśvara, Súrya, Agóravírabhadra and the Saptamàtrikas.

There is a collection of specimens of Buddhist sculptures in marble from Amaràvati, kindly presented by the Madras Museum.

An interesting exhibit is a plaster of Paris model of one of the shrines of the Múvarkoil (Kodumbàlúr) prepared by the Curator Mr. Venkatarangam Raju.

7. There is a small collection of *paintings* including miniatures, specimens of the Tanjore school of painting and oil paintings by the Curator which are of ethnological interest as illustrating local types.

8. The *library* contains 350 volumes, mainly works of reference.

The number of exhibits on June 30, 1937 was as follows:—

	Section.	*Number.*
1.	Arts and Industries...	336
2.	Economic section	993
3.	Natural History (including Entomology)	3,816
4.	Ethnology	748
5.	Numismatics	811
6.	Archæology	595
7.	Pictures	25
8.	Library	350
		7,674

Educational service.—The Museum welcomes school parties; and Headmasters and Headmistresses of schools in the Town frequently visit it with their pupils, and are taken round by the Curator who explains the specimens to them. Parties of students from the mofussil get an opportunity of visiting the Museum when they gather in the capital for the annual Children's Day celebration.

The Museum is open on all days except Sundays and Public holidays, from 7.30 to 11 a. m. and 2 to 5 p. m. Monday afternoons are set apart for gosha women. Admission is free on all days.

The daily average attendance is about 500. The total number of visitors during fasli 1346 was 1,34,105. The largest attendance is recorded on the Tirugókarnam car festival day in July-August, on which day in 1936-37, the number of visitors was 18,118.

The table below shows the number, sex and literacy of the persons that visited the Museum in faslis 1345 and 1346 :—

Fasli.	Men.			Women.			Total.
	Literates.	Illiterates.	Total.	Literates.	Illiterates.	Total.	
1345	11,110	61,369	72,479	654	60,848	61,502	1,33,981
1346	8,950	61,801	70,751	561	62,793	63,354	1,34,105

The Museum publishes an annual report. Mr. Venkatarangam Raju, the Curator, has published a bulletin relating to the prehistoric urn-burials excavated at five places in the State.

Financial.—The expenditure on the Museum including the establishment during the five faslis 1342 to 1346 was follows :—

Fasli.	*Cost.* Rs.
1342	 4,035
1343	 3,897
1344	 4,198
1345	 4,629
1346	 5,092

General.—The administrative head of the Museum is the Curator who is assisted by a taxidermist.

The Museum has won the approbation of a number of distinguished visitors including the Political Agents to the State and high officials and scholars. Recently Mr. Hargreaves, formerly Director-General of Archæological Survey of India, visited the Museum in connection with the enquiry of the Museums Commission. A brief account of the Museum is given on page 200 of the Report on the Museums of India by Mr. S. F. Markham, M. P. and himself. The statistics given in the Report show that the Pudukkottai State Museum compares very favourably with quite a large number of Museums of the same class in India.

Other examples of Museum enterprise.—"It has been the policy of the Government of India," observe Messrs. Markham and Hargreaves in their Report, "to keep the small and moveable antiquities recovered from the ancient sites in close association with the remains to which they belong, so that they may be studied amid their natural surroundings and not lose focus by being transported." This has also been to some extent the policy of the Darbar in regard—for example—to the finds on the site of the Jain temple excavated at Cheṭṭipaṭṭi.

The Raja's College Museum.—The collections comprise Zoological and Entomological, Botanical and Agricultural specimens and models to illustrate the study of Human Physiology. The Bird collections illustrate the division into carnivorous, herbivorous and omnivorous birds and include climbers, perchers and wading and swimming birds. There are a few reptiles and insects, and in the entomological collection are specimens of Orthoptera, Coleoptera, Lepidoptera, Rhyncota, Hymenoptera and Diptera.

Specimens illustrative of the different parts of plants are found in the Botanical section, while improved strains of seed, samples of chemical manure, modern ploughs, harrows and mowers form the chief exhibits in the Agricultural section.

There are also a few photographs and printed charts relating to Natural Science and Agriculture.

Messrs. T. S. Sundaram Aiyar and K. R. Srinivasa Aiyar started the collection in March 1937. The specimens are housed in a spacious room on the first landing of the southern staircase, and the whole arrangement of the showcases, models and charts is planned with a view to creating interest and rousing the attention of students who offer the elements of Natural science or Agriculture for the School Leaving Certificate Examination.

The Old Palace Portraits.—In the Darbar hall of the old palace there is a collection of portraits of the Tondaimàns and of a few prominent Europeans. Mr. Percy Brown makes a passing reference to these "portraits in oils, some actual life size,"* and Mr. Percy Macqueen, I. C. S., a former Political Agent, has published a short account of them.† He classifies them under three groups—the Tanjore School, the English School and the School of Ravi Varma, and catalogues them as follows:—

No.	Subject.	Artist.
1.	Vijaya Raghunátha Ráya Tondaimán (1730—1769). ...	*Unknown* (Tanjore School).
2.	Ráya Raghunátha Tondaimán (1769—1789). ...	Do.
3.	Vijaya Raghunátha Tondaimán (1789—1807). ...	Ramaswami Māistry, (Tanjore School).
4.	Vijaya Raghunátha Ráya Tondaimán (1807—1825). ...	*Unknown.*
5.	Raghunátha Tondaimán (1825—1839). ...	Williams, (English School).
6.	Ramachandra Tondaimán in Darbar (1839—1886). ...	Govindaswami Maistry, (Tanjore School).

* "Indian Painting" P. Brown. 'The Heritage of India Series' 1927 (Page 64).

† "The Pudukotah Portraits" P. Macqueen. Pudukkóttai State Press, 1926.

No.	Subject.	Artist.
7.	Ramachandra Tondaimán in Darbar ...	F. C. Lewis, (English School).
8.	Do. ...	Raja Ravi Varma.
9.	Ramachandra Tondaimán ...	F. C. Lewis.
10.	Ramachandra Tondaimán and family in 1886...	Raja Ravi Varma.
11.	Ramachandra Tondaimán in 1877 ...	Do.
12.	Tirumalai Tondaimán, Brother of Raja Ramachandra Tondaimán.	F. C. Lewis.
13.	Princess Janaki Bhai Saheb ...	Raja Ravi Varma.
14.	Sir Mártanda Bhairava Tondaimán Bahadur ... (at the age of 5).	Do.
15.	Sir Mártanda Bhairava Tondaimán Bahadur ... (at the age of 18).	G. S. Von Strydonck.
16.	Sir Mártanda Bhairava Tondaimán Bahadur ... (in 1914).	Venkatarayalu Raju, (late Palace Manager)
17.	Rajakumar Vijaya Raghunátha Dorai Rája—Regent.	Do.
18.	Rajakumar Captain B. R. Dorai Rája ...	Do.
19.	Do. ...	Do.
20.	The late Maharaja Krishna Rája Wadiyar Bahadur of Mysore.	*Unknown* (Tanjore School).
21.	Raja of Tanjore ...	Do.
22.	Do. ...	Do.
23.	General Sir William Blackburne ... (Resident in Tanjore and Pudukkottai 1810–23).	Do.
24.	Sir Henry Pottinger ... (Governor of Madras 1848–54).	F. C. Lewis.
25.	The Rt. Rev. Thomas Dealtry ... (Bishop of Madras 1849–61).	Do.
26.	Rajakumar Vijaya Raghunátha Dorai Rája—Regent in Darbar.	Venkatarayalu Raju.

SECTION II.—ARCHAEOLOGY.

Epigraphy :—In 1889, Sir Sashia Sàstriar appointed an officer to prepare a catalogue of objects of historical and archæological interest in the State. In 1901, the Madras Government advised the Darbar to take steps to preserve objects of archæological interest, which they readily undertook to do. In 1906 the late Mr. S. Radhakrishna Aiyar who was then the State Manual Officer recommended that the inscriptions in the State should be copied. Messrs. T. A. Gopinatha Rao, Epigraphist in Madras and in Travancore and Rao Bahadur V. Venkayya also of the Madras Epigraphical Department, who were consulted by the Darbar in 1908-09, advised the creation of an Archæological Department, to make a regular survey of the historical monuments in the State. In 1910, a special establishment was sanctioned to examine and take estampages of all the inscriptions in the State; and the officer deputed for this work was placed under the control of the then State Manual Officer. In 1912, the field work was completed. In 1913–14, Dewan Bahadur L. D. Swamikkannu Pillai helped the Archæologist in fixing the dates of the inscriptions. The work of deciphering was completed in 1915–16. 31 copper plate inscriptions were transcribed in 1917–18. The list of the lithic inscriptions and their transcriptions arranged chronologically according to dynasties was prepared by Mr. N. P. Swaminatha Aiyar, the State Archæologist, and published in two volumes in 1928–29*, under the guidance of Sir. T. Desikachariar.

The Darbar have now arranged to publish an English translation of the Inscriptions with particulars of the situation, dynasty, date, language and script of each inscription. This work which is being prepared by Mr. K. R. Srinivasa Aiyar is to be entitled " Inscriptions in the Pudukkóttai State—Translated

*" Chronological List of Inscriptions of the Pudukkóttai State (1929)" and " Inscriptions (Texts) of the Pudukkóttai State-arranged according to dynasties (1929)," State Press, Pudukkóttai.

into English." It is hoped that the first volume containing the Bràhmi Pallava Grantha and early Tamil inscriptions and those of the Muttaraiyars, Pallavas, and Cóḷas will be published shortly. The second volume will contain the Pàndya inscriptions: and the third, those of the Muhammadan and Vijayanagar dynasties and all the miscellaneous and anonymous inscriptions. The following tables show the number of inscriptions so far copied in the State:—

1. Table of inscriptions arranged according to scripts and languages.

Script.	Language.	Number of inscriptions.
Bráhmi ...	Tamil ...	1 (Ins. No. 1.)*
Pallava grantha ...	Sanskrit ...	4 (Nos. 2, 3, 6, 14.)
Pallava grantha and Tamil.	Sanskrit and Tamil.	3 (Nos. 4, 5, and 236.)
Old Tamil ...	Tamil ...	15 (Nos. 7-13, 15-19, 237, 773 and 1120.)
Grantha ...	Sanskrit ...	4 (Nos. 1061, 1088, 1091, & 1108).
Tamil-Grantha ...	Tamil and Sanskrit.	2 (Nos. 791, 889.)
Tamil-Nágara ...	Tamil and Sanskrit.	1 (No. 1109.)
Telugu ...	Telugu ; Telugu and Sanskrit.	3 (Nos. 1093 ; 890, 891.)
Kannada ...	Kanarese ...	2 (Nos. 1086, & 1087.)
English and Tamil ...	English and Tamil...	1 (No. 886.)
Tamil (from about the 11th century down to modern times.)	Tamil ...	The rest. (of the 1,130 inscriptions.)

* The figures in brackets indicate the serial numbers of the Inscriptions in "Chronological list of Inscriptions of the Pudukkóttai State" and in "Inscriptions (Texts) of the Pudukkóttai State."

2. Table according to Dynasties and Rulers.

Dynasties.	Number of inscriptions.
Muttaraiyars	3
Irukkuvéḷs	3
Pallavas (Later Pallavas)	5
Cóḷas—(Rájakésaris, Parakésaris, the kings of the Víjayálaya line, the kings of the Cóḷa-Cáḷukya line, and unidentified Cóḷa kings).	216
Hoysálas (of the 13th century)	3
Páṇḍyas (of the first and second empires identified and unidentified)	428
Báṇas	9
Muhammadan Emperors	2
Vijayanagar Emperors (First or Saṅgama; Second or Sáḷuva; Third or Tuḷuva; Fourth or Aravidu dynasties).	86
Pallavaráyar chieftains	13
Tondaimáns of Arantangi	9
Toṇḍaimáns of Pudukkóttai	30
Other Miscellaneous, Anonymous and Mutilated inscriptions.	322
	1,130

Conservation.—In fasli 1328 (1918-19), Sir T. Desikachariar suggested the conservation of places of archæological importance in the State, and in that year ten monuments were selected for conservation. They were classified into two heads:—(1) those to be maintained permanently in good repair; and (2) those that it is only possible or desirable to save from further decay by such minor measures as the eradication of vegetation and the prevention of damage due to the stagnation or percolation of water. The Ancient Monuments Preservation Regulation was passed in 1930, and since that year a considerable number of ancient monuments in the State have been conserved.

The following is the list of such monuments brought up to 1st January 1938:—*

No.	Nature of Monument.	Taluk.	Village.	Particulars.
1	**Temple** ...	Álangudi ...	Tirukkaṭṭaḷai.	Siva temple: the central shrine of Sri Sundaréśvara with its stone *Vímána* and stone *stúpi*, the *ardhamaṇṭapam*, the *mahámaṇṭapam*, and the seven small shrines built round the central shrine.
2	Do.	Kolattúr ...	Nárttámalai.	(1) Two rock-cut temples and Vijayálaya Cóḷíśvara temple on Mélamalai; (2) two Śiva temples on Kaḍambarmalai.
3	Do.	Do.	Koḍumbálur.	(1) Two temples recently renovated (Múvarkóvil). (2) the Śiva temple in the rear of Koḍumbáḷúr tank. (3) a small four sided tank in front of this temple, and (4) a well north-east of Múvarkóvil with a subterranean passage.
4	Do.	Do.	Kunnáṇḍár kóvil.	(1) The cave-temple, and (2) the hall of hundred pillars or car *maṇṭapam*.
5	Do.	Do.	Maḍattukóvil (Near Naṅgupaṭṭi.)	The temple.
6	Do.	Do.	Śittanna-váśal.	(1) The cave-temple, and (2) Éḷadippattam—natural cave with Brahmi inscriptions.
7	Do.	Do.	Kuḍumiyá-malai.	Śiva temple (the whole of it)

* All the monuments enumerated in this section, are described in Vol II.—History and Gazetteer.

No.	Nature of Monument.	Taluk.	Village.	Particulars.
8	**Temple** ...	Kolattúr ...	Malayaḍip-paṭṭi.	Rock-cut cave-temples (Śíva and Viṣṇu).
9	Do.	Do.	Tiruviḷáṅ-guḍi. (Súriyúr).	Siva temple.
10	Do.	Do.	Cheṭṭipaṭṭi. (Tiru-veṇṇáyil).	Ruined Jain temples (with images).
11	Do.	Do.	Toḍaiyúr ...	Śiva temple.
12	Do.	Do.	Káḷiyápaṭṭi.	Ruined Śiva temple.
13	Do.	Do.	Máṅguḍi ...	(1) Śiva temple on the rock east of the Periyakuḷam, and (2) the rock cut Piḷḷayár temple.
14	Do.	Do	Tiruppúr ...	Cóḷíśvara Śiva temple in S. No. 309—west of Śivan-kóvil Úraṇi.
15	Do.	Do.	Virálúr ...	Śiva temple.
16	Do.	Tirumayam.	Amman kuricci.	Śiva temple.
17	Do.	Do.	Tirukkaḷam-bùr.	Śiva temple.
18	Do.	Do.	Tirumayam.	Śiva and Viṣṇu temples. The Rock-cut Pallava shrines.
19	Do.	Do.	Puválaikkuḍi	Rock-cut shrine.
20	Do.	Do.	Malayak-kóvil.	Two Rock-cut shrines.
21	Do.	Do.	Dévarmalai.	Rock-cut shrine.
22	Do.	Do.	Éṇádippaṭṭi. (Várpet).	Śivankovil on the Western bund of Enádikaṇmai.
23	Do.	Do.	Kaṇṇanúr.	Bálasubrahmaṇya temple.

	Nature of Monument.	Taluk.	Village.	Particulars.
24	**Jain Image** ...	Álangudi ...	Sembáṭṭúr.	A Tírthaṅkara, Yakṣi and Lion Pillars.
25	Do.	Do.	Puttámbúr.	Jain image (called "Moṭṭai Piḷḷaiyár.")
26	Do.	Do.	Tirugó-karṇam.	Saḍaiyapárai Jain Tírthaṅkara image.
27	Do.	Do.	Vaḷavam-paṭṭi.	Jain image near State School.
28	Do.	Kolattur ...	Annaváśal.	Two Jain Tírthaṅkara images in the cocoanut tope west of Paḷḷi Úrani.
29	Do.	Do.	Vírakkuḍi.	Jain Tírthaṅkara Image in S. No. 212 5 (Śamaṇar Méḍu).
30	Do.	Do.	Ammá-chatram.	Jain Images on Bommai Malai and on Áḷuruṭṭi Malai.
31	Do.	Do.	Tiruppúr.	Jain Image in S. No. 309/48.
32	Do.	Do.	Tékkáṭṭúr.	Tírthaṅkara image.
33	Do.	Do.	Kaṇṇaṇguḍi.	Jain image in S. No. 231/2.
34	Do.	Do.	Virálur.	Jain image.
35	**Fort** ...	Alangudi ...	Pudukkóṭṭai Town.	Remnants of the Pudukkóṭṭai Fort.
36	Do.	Tirumayam.	Tirumayam.	Fort on hill and town wall.
37	Do.	Do.	Kíḷánilai.	Fort walls.
38	Do.	Do.	Near Arimaḷam.	Púram Fort near mile 9/4 on road No. 6.
39	Do.	Do.	Kóṭṭaikáḍu.	Small earth Fort near road No. 16 (Arimaḷam—Tirumayam road—south of miles 2/2 and 2/3).

No.	Nature of Monument.	Taluk.	Village.	Particulars.
40	**Inscribed Stone.**	Kolattur ...	Rájáḷippaṭṭi.	A stone in a sluice in a ruined tank mentioning the date of the reign of the Pallava King Nandipóttan.
41	Do.	Do.	Cheṭṭipaṭṭi.	S. No. 393.
42	Do.	Do.	Saḍaiyapáṛai near Tirugó-karṇam.	Inscriptions near the Jain image.
	Dolmens ...	**See separate**	**list below.**	

Renovation.—In fasli 1329 (1919-20) shrubs growing in the masonry of the Múvarkóvil in Koḍumbàḷúr were removed. Ten years later the work of restoring the temples was taken in hand, and it was finished in fasli 1341 (1931-32). The Śiva temple at Maḍattukóvil was renovated in faslis 1345-46, and the Vijayàlaya Cóḷíśvara temple on the Mélamalai at Nàrttàmalai, in fasli 1346. The renovation of the Śiva temple at Śembàṭṭúr is nearing completion. The D. P. W. have renovated a number of other temples for the Devastanam Department. But in the case of the temples enumerated above, the renovation has been as far as possible carried on scientifically on the lines suggested in the Conservation Manual of the Government of India. The renovation of the following temples has been sanctioned or begun :—

1. The Tiruvagníśvara temple at Chittúr (Tirumayam Taluk).
2. Bàlasubrahmaṇya temple at Kaṇṇanúr (Tirumayam Taluk).

3. Śiva temple at Toḍaiyúr (Kolattur Taluk).
4. Tiruviḷàṅguḍi Śiva temple (Kolattur Taluk).
5. Śiva temple at Kàḷiyàpaṭṭi (Kolattur Taluk).
6. Śiva temple at Viràlúr (Kolattur Taluk).

In fasli 1339 (1929-30) an iron grating was put up in front of the Śittannavàśal cave temple to protect the Pallava paintings. In October 1937, the Darbar enlisted the services of Mr. Paramasivam, Archæological Chemist of the Madras Museum to advise them as to the best method of cleaning and preserving the paintings. The work of cleaning and preservation is now in progress.

Excavation.—Excavations on the site of the Oṭṭaikóvil in Cheṭṭipaṭṭi (Tiruveṇṇàyil) by Mr. Venkatarangam Raju, the State Museum Curator, in 1936 yielded interesting results. The moulded basements of a group of temples and various objects of archæological interest were found, including 12 fine stone statues of Tírthaṅkaras and 2 stone pillars based on couchant lions. This group of Jain structural temples in stone of the early Cóḷa period is of unusual interest.

In 1915-16, the Curator excavated five different sites containing burial urns —near Tirukkaṭṭaḷi, at Nilayappaṭṭi on the edge of the Pulvayal forest, in the south-western corner of the same forest, at Moṭṭaimalai near Śellukuḍi, and at Àraṇippaṭṭi. The results of the excavations have been published in a bulletin,—No. I: "The Prehistoric Tombs of the Pudukkóttai State." In 1919, Prof. P. T. Srinivasa Íyangar, the Curator, and the present writer excavated a few burial sites near Śaḍaiyapàṛai at Tirugókarṇam. In 1935, the Curator opened more than 30 sites at Śittannavàśal, Àraṇippaṭṭi, Surandapaṭṭi, Tachanpaṭṭi and Toḍaiyúr, all containing megalithic tombs. The interesting finds yielded by these excavations are preserved in the State

Museum. A description of the burial urns and the megalithic tombs will be found in Volume II. The list of the important places where they are found is given below:—

Taluk.	Site.	Remarks.
Álangudi Taluk.	Pudukkóttai Town (Kalasakkádu-on Tirukkaṭṭaḷai Road—east of the Town). ...	Dolmens.
	Tirukkaṭṭaḷai ...	Do. On the approach to the village from west.
	Tirugókarṇam—(Sádaiyapáṟai poṭṭal—west of the rock).	Urns—excavated by Prof. P. T. S. Iyengar and Messrs. K. V. Raju and K. R. V. Iyer.
	Puttámbúr ...	......
	Sembáṭṭúr ...	......
	Peruṅgaḷúr ...	S. Nos. 267/A, 269/A and 302.
	Ádanakkoṭṭai ...	S. No. 185/2—Samudáyam lands—urn-burials.
Kolattúr Taluk.	Valaiyanpaṭṭi ...	Vaḍuganikuḷam water-spread and assessed waste land nearby—S. Nos. 39 and 40.
	Oduganpaṭṭi ...	Vilánkuḷam Poramboke. S. Nos. 263/A, and 165.
	Ucháṇi ...	Kuraṅguppaṭṭaraikkuḷam water-spread.
	Narangianpaṭṭi ...	Pudukkuḷam water spread.
	Amburáppaṭṭi ...	Village outskirts—S. No. 15/A, & 12/B and No. 16 Poramboke—Conserved—cairns and dolmens.
	Múttampaṭṭi ...	Grazing-ground Poramboke near the right flank of Ádanakkuḷam—S. No. 128/A-1.

Taluk.	Site.	Remarks.
Kolattúr Taluk.	Viruduppaṭṭi ...	Pudukkuḷam water-spread and adjoining grazing-ground. S. Nos. 172 & 173/1.
	Búdakuḍi ...	Vaiyápuri kuḷam Poramboke.
	Táyinipaṭṭi ...	Táyinikkuḷam water-spread. S. No. 69/2 Kallukkuttu- Poramboke.
	Vágappaṭṭi ...	Vágappaṭṭi kuḷam—urn-burials.
	Śittannavááśal ...	Eastern and Southern side of hill; tank water-spread on south of main road; and near the Periyakuḷam in the village—Megalithic cells excavated by Museum Curator.
	Seṅgaḷúr ...	Grazing ground—S. Nos. 160 & 108—assessed dry waste. Burial urns.
	Káṭṭukkóṭṭaippaṭṭi ...	Káttukkóṭṭai tank water-spread—S. No. 70. Urn burials.
	Kíḻaiyúr ...	Vilári kulam neighbourhood.
	Tiruppúr ...	Near Tiruppúr úraṇi—S. No. 309/21. Conserved dolmens.
	Kiḷḷanúr ...	S. Nos. 186/4; 174/2-3-7 and 9; 175/2; and Poramboke S. No. 186/4.
	Vaittúr ...	S. No. 34/1—urn-burials.
	Vilappaṭṭi ...	S. No. 5/C—assessed dry waste.
	Viṭṭampaṭṭi ...	S. No. 19/1—patta dry land.
	Ammáchatram ...	Siṟuvarakuḷam S. No. 116 and 243/A-2. Conserved.
	Veḷḷanúr ...	S. Nos. 144/2-A; 172/2.
	Satyamaṅgalam ...	S. No. 1A major inám.
	Madiyanallúr ...	Vári (channel) S. No. 48; and Nattam (house site) S. No. 39—urn-burials.

Taluk.	Site.	Remarks.
Kolattur Taluk.	Ánnavásal ...	Kuraṅgupaṭṭarai kal kuttu—S. No. 310 (Megalithic ?) .
	Áriyúr ...	S. No. 214/5—ayan dry land.
	Márâyappaṭṭi ...	S. No. 153/3.
	Pulvayal ...	Pudukkuḷam S. No. 204/2; (a site on the S. W. corner containing urn-burials)—was excavated by the Museum Curator.
	Nilayappaṭṭi ...	On the edge of the Pulvayal forest—a site containing urn-burials—excavated by the Museum Curator.
	Sundarappaṭṭi (Muttampatti vattam) ...	Periyakulam S. No. 81/A—urn-burials.
	Parambúr ...	Kalkuttu-poramboke (megalithic ?)
	Tachanpaṭṭi ...	Megalithic cells excavated by Museum Curator.
	Toḍaiyúr ...	Do.
	Áraṉippaṭṭi ...	Dolmens in the fore-shore of Pudukkuḷam. Megalithic cells and urns excavated by Museum Curator—**Conserved.**
	Śellukuḍi ...	Moṭṭamalai side—urn-burials excavated by Museum Curator.
	Súrandappaṭṭi ...	Megalithic cells-excavated by Museum Curator.
	Kiḷḷikóṭṭai ...	S. No. 279—dolmens.
	Koḍumbálúr ...	......
	Káḷiyáppaṭṭi ...	......
	Malayaḍipaṭṭi ...	......
	Rájagiri ...	......

Taluk.	Site.	Remarks.
Tiru-mayam Taluk.	Nallúr ...	Maṇipudu éndal—S. No. 391/6-B/2.
	Neriñjikkuḍi ...	S. Nos. 359 & 364 and poramboke vári S. No. 103/1.
	Oliyamaṅgalam ...	S. Nos. 359 and 364—paṭṭa-dry Kuraṅguppaṭṭarai.
	Mélattaṇaiyam ...	S. Nos. 345/A & 345/B
	Śevalúr ...	S. No. 110/1.
	Maṟavámadurai ...	Kuraṅguppaṭṭarai S. No. 444/2—paṭṭa-dry.
	Káraiyúr ...	Adanai éndal—Kuraṅguppaṭṭarai—Poramboke-vári S. No. 41; Śuṇḍelippárai—Kuraṅguppaṭṭarai—poramboke S. No. 844; Tuṇḍu Kuraṅguppaṭṭarai poramboke S. No. 245/1-B.
	Araśamalai ...	Poramboke vári S. No. 259.
	Múlanguḍi ...	Neriyankaṇmai S. No. 371.
	Túttúr ...	S. No. 86/4.
	Lambalakkuḍi ...	S. No. 431/1.
	Ténimalai ...	On waste land west of Road (No. 18).

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